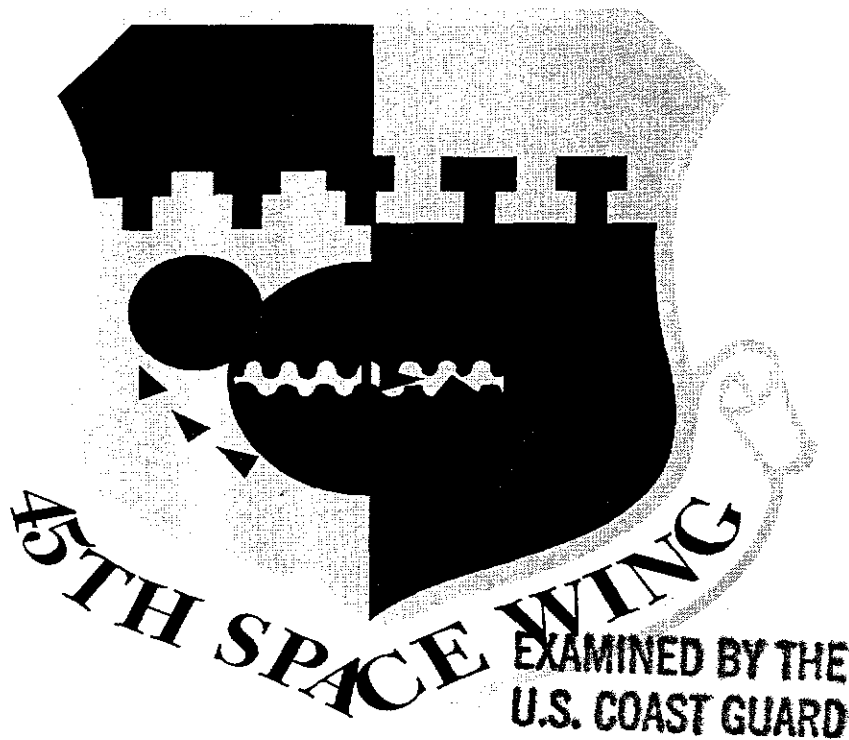


45th SPACE WING
CAPE CANAVERAL, FLORIDA



FEB 18 2000

45th SPACE WING HAZARDOUS MATERIALS
RESPONSE PLAN 32-3, VOL III A
OIL SPILL CONTINGENCY PLAN

45 SW OPLAN 32-3, VOL III A

JANUARY 1999

U.S. COAST GUARD
EXAMINED BY THE

FOREWORD

This volume has been prepared to bring the Cape Canaveral Air Station (CCAS) in compliance with the Oil Spill Act of 1990 (OPA 90) related requirements for all facilities handling petroleum products to have an Oil Spill Contingency Plan. The format for this plan is an adaptation of a standard format developed for the U. S. Navy to fulfill the requirements of the USCG 33 CFR 154, EPA 29 CFR 112, and other regulations to implement OPA 90.

The 45th Space Wing (45 SW) has a comprehensive Hazardous Materials Response Plan (i.e. 45 SW OPLAN 32-3, Volumes I through VI) to fulfill regulatory requirements and handle any foreseeable hazardous material release or other emergency at CCAS. However, due to the specialized nature of petroleum related response requirements and the specific application of the Unified Command System (UCS)/Incident Command System (ICS) that outside agencies such as the U.S. Coast Guard, State of Florida, and local agencies use when a petroleum release reaches navigable waterways, this volume of the manual has been tailored to reflect the manual organization, response organization, and documentation requirements specified by OPA 90 generated regulatory requirements. The positions within the response organization shown in this volume are applications of the ICS organization shown in the larger ICS used by the 45 SW and defined in Volume I of this OPLAN. The names of the Command and Section Head Response functions defined by OPA 90 are shown first in this Volume III followed by the equivalent 45 SW position. In the case of a large spill where additional help defined by the ICS system is required, the support functions defined by the equivalent position of the Section Head in the larger ICS organization defined in Volume I will be used. This will allow outside regulatory personnel trained in the OPA 90 ICS system to easily fit in and understand the CCAS response organization during a response without requiring a modification of the larger CCAS Hazardous Materials Response team. Any related 45 SW documentation will make reference to this volume for petroleum related spill response management.

The terms Qualified Individual (QI) (USCG terminology) and Emergency Coordinator (USEPA terminology) are new terms under OPA 90. The term QI denotes the CCAS person with the full authority to activate and contract with oil spill removal organizations, activate personnel and equipment, act as liaison with the Federal On-Scene Coordinator (FOSC), and obligate any funds required to carry out oil spill response activities. For the CCAS, the QI will be the CCAS Commander which will also serve as the Incident Commander (IC). For smaller spills requiring only CCAS assets, the CCAS Commander has designated the Fire Department Chief to act as the Deputy IC. Under the Unified Command System, the Incident Commander (IC) is the person listed at the head of the facility response organization and has total responsibility for directing the facility's response assets, with oversight, and in some cases, direct control by the FOSC.

The 45th SW OPLAN 32-3, Volume III A fulfills the Oil Spill Contingency Plan requirements specified by OPA 90 related regulations. A separate, condensed, manual summarizing the specific information and requirements to respond to the first hours of a spill is provided as 45th SW OPLAN 32-3, Volume III B.

Training and spill response drills are an important new and extensive requirement of the OPA 90 regulations. Due to the cost of conducting the extensive number of required drills, Regional Incident Commanders are encouraged to develop regional drill and training compliance schedules to ensure uniform compliance among their facilities and to effect cost savings whenever possible. Training and drill records must be maintained for at least five years.

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FACILITY RESPONSE PLAN

1.0 FACILITY INFORMATION: The Cape Canaveral Air Station (CCAS) is located on an east coast barrier island in Brevard County, Florida, about 155 miles south of Jacksonville. The island is approximately 15,804 acres. The station is bordered on the east by the Atlantic Ocean, the west by the Banana River, the south by Port Canaveral, and the north by the Kennedy Space Center (KSC). The nearest civilian community to CCAS is the City of Cape Canaveral. Approximately 73 percent or 11,537 acres of CCAS has been retained in a natural state of secondary growth of vegetation indigenous to the Florida coastal dune, coastal strand, or coastal scrub plant communities. CCAS has 81 miles of paved roads connecting the various launch and support facilities with the centralized industrial area. A total of 36 launch complexes have been constructed, but only seven are still active. Other major structures include fuel storage tanks, port for marine vessels, including submarines, a skid strip, and base support facilities, consisting of warehouses, vehicle maintenance, light industrial manufacturing, paint shops, machine shops, photographic processing labs, printing plants, propellant storage, medical, hazardous waste handling, and administrative work areas. Sewage disposal is through one main sewage treatment plant, twelve package sewage plants, and one industrial waste water treatment plant. Potable water is obtained from the City of Cocoa.

Hazardous materials are received and handled at hundreds of work sites each day in amounts varying from several ounces of relatively benign substances to thousands of gallons of toxic, flammable and/or explosive materials. Control and emergency response planning for non-petroleum related products is covered in Volume I of this series. This Volume III covers the Emergency Response Planning required by the Oil Spill Act of 1990 (OPA 90) for petroleum related products handled at CCAS. Petroleum related activities at CCAS can be divided into the following categories:

Air Force Controlled Petroleum Related Activities.

There are hundreds of tanks above and below ground located through the base. Volume V of this series, the SPCC Plan, details the tanks and their locations. A detailed list of these tanks is shown in Volume V (Cape Canaveral Air Station Spill Prevention Control Countermeasures Plan) of this OPLAN. The worst case catastrophic failure would be to the 28,000 gallon tank storing RP-1, at SLC-36. All tanks are filled by tank truck.

The skid strip at CCAS refuels various planes that land on the strip. The different scenarios include:

a. When NASA planes land, they are fueled by Joint Base Operations Contract (J-BOSC) trucks which receive fuel from Fuel Storage Area No. 1.

b. When Air Force planes land, they are fueled by a United Paradyne tank truck which receives fuel from Patrick Air Force Base.

c. When civilian planes land, they are fueled by Gateway which receives fuel from the Tico airport in Titusville.

A crash from a launch is highly unlikely, as at the first sign of trouble, the vehicle would be self-destructed. If all systems failed, a worst case could be projected for an ATLAS rocket crashing in the water immediately after takeoff which carries 15,800 gallons of RP-1 and 20 gallons of hydrazine. While the DELTA rocket carries 9,700 gallons of RP-1. The TITAN rocket does not use petroleum fuel but hydrazine and nitrogen tetroxide.

Two Launch Recovery Boats are homeported at CCAS. These are identical Solid Rocket Booster (SRB) Retrieval Ships which are 176' long, 37' wide, and have a depth of 15'. Each is 743 gross tons. The vessels are tied up at the NASA pier behind Hangar AF on the Banana River. The vessels are:

M/V FREEDOM STAR
M/V LIBERTY STAR

The Naval Ordnance Test Unit (NOTU) is a tenant at CCAS. Activities include:

Trident Wharf / Basin

Can conduct emergency fueling of submarines and/or vessels up to the size of cruisers alongside the wharf.

Poseidon Wharf

Can conduct emergency fueling of submarine and/or vessels up to the size of cruisers alongside the wharf.

There is a small tank and associated piping near the wharf from which vessels can pump out their bilges, as necessary.

Army Wharf

Can conduct emergency fueling of submarine and/or vessels up to the size of cruisers alongside the wharf.

Periodically transfer various products to vessels which can include hypergolic fuels such as OTTO II and Hydrazine.

The Military Sealift Command Office (MSC) also is a tenant at CCAS. During 1996, MSC vessels received approximately 2.4 million gallons of fuel. The current homeported vessels include:

USNS VANGUARD - Refuels at the commercial piers on the other side of Port Canaveral four times a year by barge. Each barge carries approximately 250,000 gallons.

USNS HAYES - Refuels at the commercial piers on the other side of Port Canaveral once a month. Loads approximately 33,000 gallons each time.

SEA MARK III (Tug) - Refuels weekly (During 1996, there were 39 deliveries by truck (4,400 gallons each) to the CCAS wharf and 7 deliveries by pipeline on the other (commercial) side of Port Canaveral.

SEA CORE CLIPPER - Refuels twice a month by tank truck at the CCAS wharf. Each fueling averages 28,000 gallons.

Military Traffic Management Command (MTMC) conducts activities at the Army Wharf in the Central Turning basin:

There is little direct operational interface with MTMC and CCAS. Periodically MTMC will use the Army Wharf to load various materials on vessels.

The basic petroleum products that are handled at CCAS include:

- Jet Propellant-5 (JP-5)
- Jet Propellant-8 (JP-8)
- Unleaded Gasoline (MOGAS)
- Diesel Fuel (DF-2)
- Diesel Fuel
- Hydraulic Fluid
- Rocket Propellant (RP-1)
- Used Oil

TABLE FRP 1.1: FACILITY INFORMATION QUICK REFERENCE TO CAPE CANAVERAL AIR STATION (GENERAL)		
TOPIC		INFORMATION
IDENTIFICATION	NAME	CAPE CANAVERAL AIR STATION
	OWNER	U.S. AIR FORCE
	UIC	
LOCATION	MAILING ADDRESS	Commanding Officer HEADQUARTERS 45th SPACE WING (AFSPC) Patrick Air Force Base, FL 32925-3299
	PHYSICAL ADDRESS	Cape Canaveral, Florida
	COUNTY	Brevard County
	LATITUDE: North	28° 24' 06"
	LONGITUDE: West	80° 35' 00"
PHONE NUMBERS	24-HR	(407) 494-4500
	DAY	(407) 494-4500
	FAX	(407) 494-7001
FACILITY QUALIFIED INDIVIDUAL / FACILITY INCIDENT COMMANDER / EMERGENCY RESPONSE COORDINATOR	NAME	45 Space Wing Commander
	POSITION	Commanding Officer
	ADDRESS	Patrick Air Force Base, FL 32925
	WORK PHONE	(407) 494-4500
	24-HR PHONE	(407) 494-7001
ALTERNATE FACILITY QUALIFIED INDIVIDUAL/ DEPUTY FACILITY INCIDENT COMMANDER / ALTERNATE EMERGENCY RESPONSE COORDINATOR	NAME	45 Space Wing Vice Commander
	POSITION	Vice Commander
	ADDRESS	Patrick Air Force Base, FL 32925
	WORK PHONE	(407) 494-4504
	24-HR PHONE	(407) 494-7001
COGNIZANT AUTHORITIES (with city/state in parentheses)	EPA REGION	Region IV, 345 Courtland Street, NE, Atlanta, GA 30308
	USCG DISTRICT	7th USCG District, Brickell Plaza Bldg, 909 SW 1st Ave, Miami, FL 33131
	USCG COTP	Commanding Officer, 2831 Talleyrand Ave, Room 213, Jacksonville, FL 32206

Last updated: January, 1999

TABLE FRP 1.2: FACILITY OPERATIONS QUICK REFERENCE TO CAPE CANAVERAL AIR STATION (OPERATIONAL)	
TOPIC	INFORMATION
DATE OF OIL STORAGE START-UP (month/year storage facility began operation)	Volume V of this set is the SPCC plan which shows the first fuel storage tanks as being installed in 1953. A summary of the fuel tanks is also shown in Section 3 of this Volume in Table FRP 3.1
CURRENT OPERATION (brief description of operations)	<p>For a more detailed description, see Section 1.0. Activities at CCAS involving Petroleum products basically consist of the following organizations:</p> <ul style="list-style-type: none"> Air Force <ul style="list-style-type: none"> Maintain many of the storage tanks at the facility Tank truck transfer of fuel to tanks Skid strip (fueling planes) Launch of space vehicles Shuttle Recovery boats (NASA Vessels) Naval Ordnance Test Unit (NOTU) <ul style="list-style-type: none"> Trident Wharf / Basin Poseidon Wharf Army Wharf <ul style="list-style-type: none"> Military Sealift Command Office (MSC) Homeport several vessels Military Traffic Management Command (MTMC) Loading and unloading vessels at Army Wharf
SIC CODE (primary)	9711 (National Security)
DATES AND TYPES OF SUBSTANTIAL EXPANSIONS OF OIL STORAGE	Not applicable
PIPELINE RESPONSE ZONES	There is no significant transfer of petroleum products by pipeline at CCAS.

Last updated: January, 1999

1.1 OIL SPILL RESPONSE ORGANIZATION AND RESPONSABILITIES: All Department of Defense facilities have now incorporated the Incident Command System (ICS) for responding to any situation requiring crisis management at a facility. CCAS is a complex facility hosting a number of different commands, organizations, and contractors at the base. The Air Force has developed a comprehensive Crisis Management Organization using ICS principles which is defined in Volume I of this OPLAN.

The OPA '90 Regulations have also defined an ICS organization which uses similar principles, but is organized a little differently. Therefore, the U. S. Coast Guard, EPA, State of Florida, Navy, and other related organizations incorporate the OPA '90 defined ICS system. In the event of a large spill at CCAS, the Air Force may be working closely with some of these organizations. To provide a smooth transition and allow the close working with other organizations during an oil spill, CCAS will adapt their overall Crisis Management ICS defined in Volume 1 to the Oil Spill Response Organization shown in FRP Figure 1.1. This is effectively the same organization shown in Volume 1; however it is presented in OPA '90 format with appropriate adjustments in names.

The OPA '90 related regulations also require that CCAS define a Qualified Individual for the Station. For CCAS, the Qualified Individual is:

Qualified Individual: 45 Space Wing Commander (45 SW/CC)
Position: Commanding Officer
Phone Number: (407) 494-4500

Alternate Qualified Individual: 45 Space Wing Vice Commander (45 SW/CV)
Position: Vice Commander
Phone Number: (407) 494-4504

Alternate Qualified Individual: 45 Space Wing (45 CCAS/CC)
Position: Cape Canaveral Commander
Phone Number: (407) 853-3900

Upon notification of a spill, personnel on site will react without delay. The Fire Department will immediately respond and take over spill response management. Fire Department personnel will deploy boom and attempt to contain the spill while notifying the J-BOSC spill coordinator for backup. For small spills, response will be accomplished by the Fire Department and the J-BOSC personnel. If the spill is of a size that requires a larger response, the ICS organization shown in FRP Figure 1.2 will be activated.

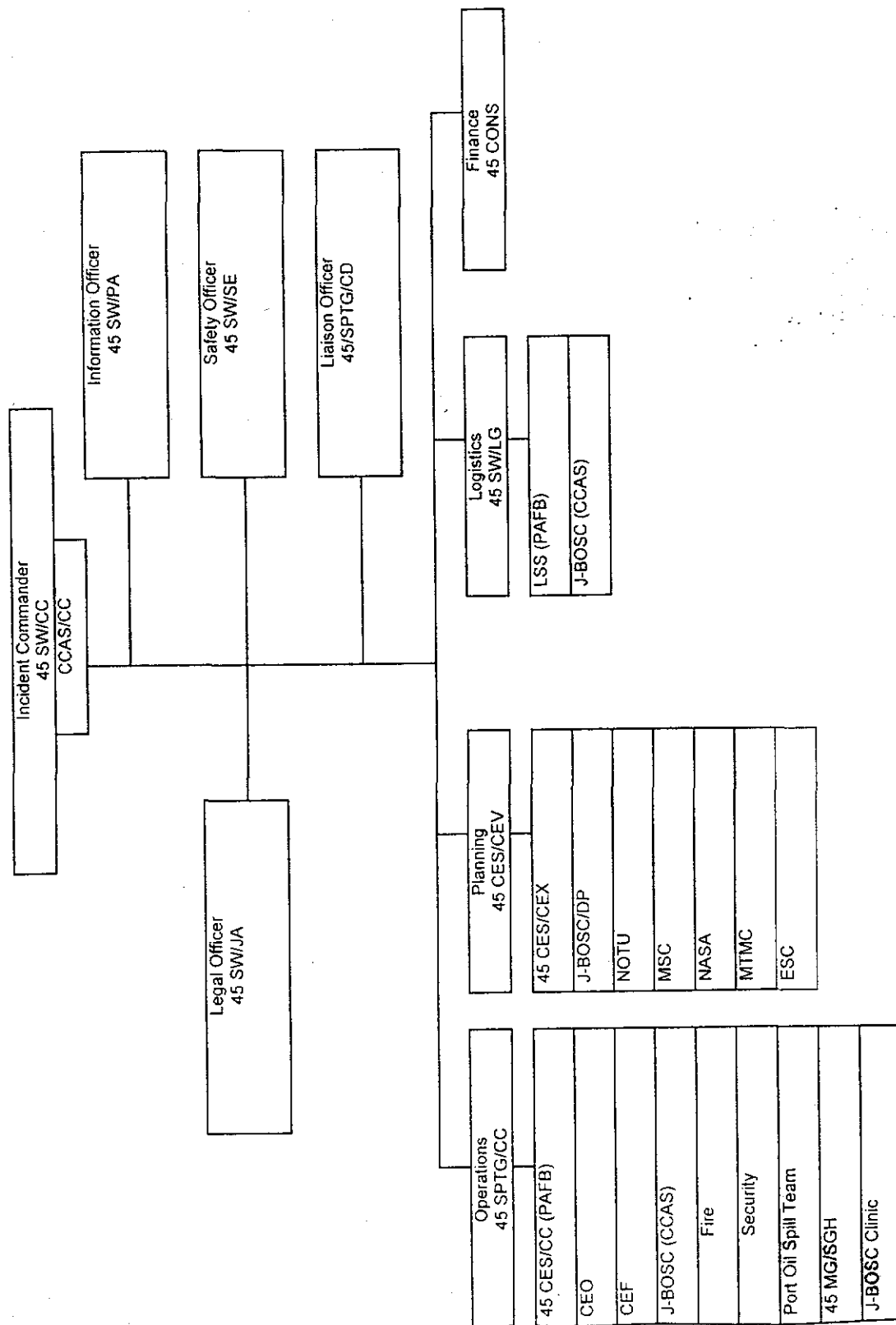
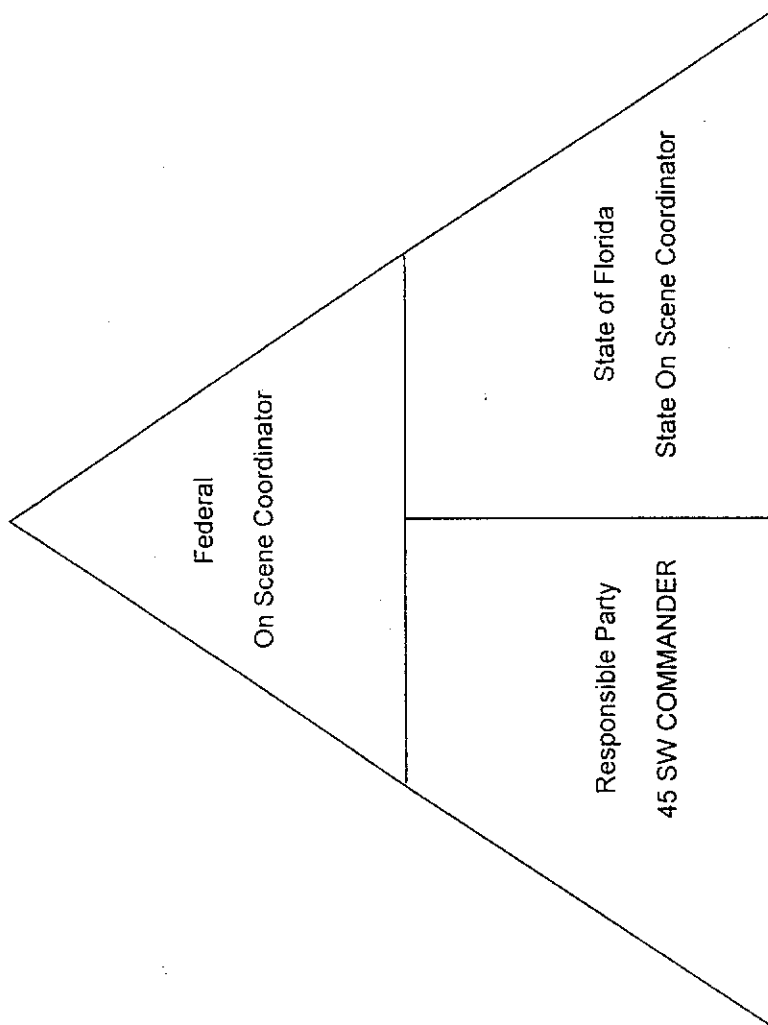


Figure FRP 1.1 45 SW ICS OIL SPILL RESPONSE ORGANIZATION

OPA 90 CCAS FRP

FRP -7-

January 1999



Note: Other Local and County Representatives will be included as required.

Figure FRP 1.2 UNIFIED COMMAND SYSTEM

Typical Specialized Oil Spill Responsibilities for each position include:

COMMON RESPONSIBILITIES

The following are responsibilities applicable to all Oil Spill ICS personnel:

1. Receive assignment, notification, reporting location, reporting time and travel instructions from your home agency.
2. Upon arrival at the incident, check-in at designated check-in locations. Check-in locations may be found at: Incident Command Post, Base or Camps, Staging Areas, Helibases, Division Supervisors (for direct line assignments).
3. Agency representatives from assisting or cooperating agencies report to Liaison Officer at the Command Post after checking in.
4. All radio communications to Incident Communications Center will be addressed: "(Incident Name) Communications."
5. Use clear text and ICS terminology (no codes) in all radio transmissions.
6. Receive briefing from immediate supervisor.
7. Acquire work materials.
8. Organize, assign and brief subordinates.
9. Complete forms and reports required of the assigned position and send material through supervisor to Documentation Unit.
10. Respond to demobilization orders.
11. Brief subordinates regarding demobilization.

UNIT LEADER RESPONSIBILITIES

Common responsibilities that must be accomplished by all Unit Leaders include (these responsibilities are not repeated in each unit listing):

1. Participate in incident planning meetings, as required.
2. Determine current status of unit activities.
3. Confirm dispatch and estimated time of arrival of staff and supplies.
4. Assign specific duties to staff; supervise staff.
5. Determine resource needs.
6. Develop and implement accountability, safety, and security measures for personnel and resources.
7. Supervise demobilization of unit, including storage of supplies.
8. Provide Supply Unit Leader with a list of supplies to be replenished.
9. Maintain unit records, including Unit/Activity Log.

INCIDENT COMMANDER / 45 SW/CC

Incident Commanders for oil discharges will, whenever possible and practical, be organized under the Unified Command Structure which includes, but not limited to:

- The predesignated federal On Scene Coordinator (OSC).
- The predesignated State Incident Commander (State IC).
- The representative of the Responsible Party (RP).

The Unified Command is responsible for the overall management of the incident. The Unified Command directs incident activities including the development and implementation of strategic decisions and approves the ordering and releasing of resources. The Unified Command may assign Deputy Incident Commanders to assist in carrying out Incident Command responsibilities.

1. Review Common Responsibilities.
2. Assess the situation and/or obtain incident briefing from prior Incident Commander.
3. Determine incident objectives and strategies.
4. Establish the immediate priorities.
5. Establish an Incident Command Post.
6. Establish an appropriate organization.
7. Brief Command Staff and Section Chiefs.
8. Ensure planning meetings are scheduled as required. Review meetings and briefings.
9. Approve and authorize the implementation of an Incident Action Plan.
10. Determine information needs and advise Command and General Staff.
11. Coordinate activity for all Command and General Staff.
12. Manage incident operations.
13. Approve requests for additional resources and requests for release of resources.
14. Approve the use of trainees, volunteers, and auxiliary personnel.
15. Authorize release of information to news media.
16. Ensure incident funding is available.
17. Notify natural resource trustee(s) and coordinate with a National Resource Damage Assessment (NRDA) Representative(s).
18. Coordinate incident investigation responsibilities.
19. Seek appropriate legal counsel.
20. Order the demobilization of the incident when appropriate.

LEGAL SPECIALIST / 45 SW/JA

The Legal Specialist will act in an advisory capacity during an oil spill response.

1. Review Common Responsibilities.
2. Participate in planning meetings if requested.
3. Advise Unified Command on legal issues relating to in-situ burning, use of dispersants and other alternative response technology.
4. Advise Unified Command on legal issues relating to Natural Resource Damage Assessment.
5. Advise Unified Command on legal issues relating to investigation.
6. Advise Unified Command on legal issues relating to finance and claims.
7. Advise the Unified Command on response related issues.
8. Maintain Unit/Activity Log.

INFORMATION OFFICER / 45 SW/PA

The Information Officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Only one Information Officer will be assigned for each incident, including incidents operating under Unified Command and multijurisdictional incidents. The Information Officer may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions.

1. Review Common Responsibilities.
2. Determine from the Incident Commander if there are any limits on information release.
3. Develop material for use in media briefings.
4. Obtain Incident Commander approval for media releases.
5. Inform media and conduct media briefings.
6. Arrange for tours and other interviews or briefings that may be required.
7. Obtain media information that may be useful to incident planning.
8. Maintain current information summaries and/or displays on the incident and provide information on status of incident to assigned personnel.
9. Maintain Unit/Activity Log.

SAFETY OFFICER / 45 SW/SE

The Safety Officer is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority, although the Safety Officer may exercise emergency authority to stop or prevent unsafe acts when immediate action is required. The Safety Officer maintains awareness of active and developing situations, ensures the preparation and implementation of the Site Safety Plan, and includes safety messages in each Incident Action Plan.

1. Review Common Responsibilities.
2. Identify hazardous or unsafe situations associated with the incident by ensuring the performance of preliminary and continuous site characterization and analysis which shall include the identification of all actual or potential physical, biological, and chemical hazards known or expected to be present on site.
3. Participate in planning meetings to identify any health and safety concerns inherent in the operations daily workplan.
4. Review the Incident Action Plan for safety implications.
5. Exercise emergency authority to stop and prevent unsafe acts.
6. Investigate accidents that have occurred within incident areas.
7. Ensure the preparation and implementation of the site specific Health and Safety Plan (HASP) in accordance with the Area Contingency Plan (ACP) and State and Federal OSHA regulations. The HASP shall at minimum address, include, or contain the following elements:
 - a. Health and safety hazard analysis for each site task or operation.
 - b. Comprehensive operations workplan.
 - c. Personnel training requirements.
 - d. PPE selection criteria.
 - e. Site specific occupational medical monitoring requirements.
 - f. Air monitoring plan: area/personal.
 - g. Site control measures.
 - h. Confined space entry procedures "only if needed." Pre-entry briefings (tailgate meetings): initial and as needed.
 - i. Pre-operations health and safety conference for all incident participants.
 - j. Quality assurance of HASP effectiveness.
8. Assign assistants and manage the incident safety organization.
9. Review and approve the medical plan.
10. Maintain Unit/Activity Log.

LIAISON OFFICER / 45 SPTG/CC

Incidents that are multi-jurisdiction, or have several agencies involved, may require the establishment of the Liaison Officer position on the Command Staff.

1. Review Common Responsibilities.
2. Provide a point of contact for assisting and cooperating Agency Representatives.
3. Identify Agency Representatives from each agency including communications link and location.
4. Maintain a list of assisting and coordinating interagency contacts.
5. Assist in establishing and coordinating inter-agency contacts.
6. Keep agencies supporting incident aware of incident status.
7. Monitor incident operations to identify current or potential inter-organizational issues and advise Incident Command as appropriate.

8. Participate in planning meetings, provide current resource status information, including limitations and capabilities of assisting agency resources.
9. Maintain Unit/Activity Log.

AGENCY REPRESENTATIVES

In many incidents involving multiple jurisdictions, an agency or jurisdiction will send a representative to assist in coordination efforts.

An Agency Representative is an individual assigned to an incident from an assisting or cooperating agency who has been delegated authority to make decisions on matters affecting that agency's participation at the incident. Agency Representatives report to the Liaison Officer, or to the Incident Commander in the absence of the Liaison Officer.

1. Review Common Responsibilities.
2. Ensure that all agency resources are properly checked-in at the incident.
3. Obtain briefing from the Liaison Officer or Incident Commander.
4. Inform assisting or cooperating agency personnel on the incident that the Agency Representative position for that agency has been filled.
5. Attend briefings and planning meetings as required.
6. Provide input on the use of agency resources unless resource technical specialists are assigned from the agency.
7. Cooperate fully with the Incident Commander and the General Staff on agency involvement at the incident.
8. Ensure the well-being of agency personnel assigned to the incident.
9. Advise the Liaison Officer of any special agency needs or requirements.
10. Report to home agency dispatch or headquarters on a prearranged schedule.
11. Ensure that all agency personnel and equipment are properly accounted for and released prior to departure.
12. Ensure that all required agency forms, reports, and documents are complete prior to departure.
13. Have a debriefing session with the Liaison Officer or Incident Commander prior to departure.

NRDA REPRESENTATIVE / 45 CES/CEV

The Natural Resource Damage Assessment (NRDA) Representative is responsible for coordinating NRDA needs and activities of the trustee team within the ICS spill response operations. This includes close coordination with the Liaison Officer for obtaining timely information on the spill and injuries to natural resources. The Representative will coordinate NRDA or injury determination activities.

1. Review Common Responsibilities.
2. Attend planning meetings as required.
3. Attend appropriate meetings to facilitate communication between NRDA Team and ICS.
4. Provide status reports to appropriate requesters.
5. Identify site access, staffing and logistical support needs of the NRDA Team to the Liaison Officer.
6. Interact with appropriate units to collect information requested by the NRDA Team.
7. Obtain necessary safety clearances for access to sampling sites.
8. Coordinate with other organizations to identify personnel available for NRDA.
9. Maintain Unit/Activity Log.

OPERATIONS SECTION CHIEF / 45 SPTG/SS

The Operations Section Chief is responsible for the management of all operations directly applicable to the primary mission. The Operations Chief activates and supervises elements in accordance with the Incident Action Plan and directs its execution; activates and executes the Site Safety Plan; directs the preparation of unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plans as necessary, and reports such to the Incident Commander.

1. Review Common Responsibilities.
2. Develop operations portion of Incident Action Plan.
3. Brief and assign operations personnel in accordance with Incident Action Plan.
4. Supervise the execution of the Incident Action Plan for Operations.
5. Request resources needed to implement the Operation's tactics as part of the Incident Action Plan development.
6. Ensure safe tactical operations.
7. Make or approve expedient changes to the Incident Action Plan during the operational period as necessary.
8. Approve suggested list of resources to be released from assigned status (not released from the incident).
9. Assemble and disassemble teams/task forces assigned to operations section.

10. Report information about changes in the implementation of the IAP, special activities, events, and occurrences to Incident Commander as well as to Planning Section Chief and Information Officer.
11. Maintain Unit/Activity Log.

PLANNING SECTION CHIEF / 45 CES/CEV

The Planning Section Chief, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. Information is needed to 1) understand the current situation, 2) predict probable course of incident events, and 3) prepare alternative strategies for the incident.

1. Review Common Responsibilities.
2. Activate Planning Section units.
3. Assign available personnel already on site to ICS organizational positions as appropriate.
4. Collect and process situation information about the incident.
5. Supervise preparation of the Incident Action Plan.
6. Provide input to the Incident Command and Operations Sections Chief in preparing the Incident Action Plan.
7. Participate in planning and other meetings as required.
8. Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the Incident Action Plan.
9. Determine need for any specialized resources in support of the incident.
10. Provide Resources Unit with the Planning Section's organizational structure including names and locations of assigned personnel.
11. Assign Technical Specialists where needed.
12. Assemble information on alternative strategies.
13. Assemble and disassemble teams or task forces as necessary.
14. Provide periodic predictions on incident potential.
15. Compile and display incident status summary information.
16. Provide status reports to appropriate requesters.
17. Advise General Staff of any significant changes in incident status.
18. Incorporate the incident Traffic Plan (from Ground Support Unit), Vessel Routing Plan (from Vessel Support Unit) and other supporting plans into the Incident Action Plan.
19. Instruct Planning Section Units in distribution and routing of incident information.
20. Prepare recommendations for release of resources for submission to members of Incident Command.
21. Maintain Section records.
22. Maintain Unit/Activity Log.
23. Contracts regulatory agencies for reporting purposes.

LOGISTICS SECTION CHIEF / 45 SW/LG

The Logistics Section Chief, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The Logistics Section Chief participates in development and implementation of the Incident Action Plan and activates and supervises Branches and Units within the Logistics Section.

1. Review Common Responsibilities.
2. Plan organization of Logistics Section.
3. Assign work locations and preliminary work tasks to Section personnel.
4. Notify Resources Unit of Logistics Section units activated including names and locations of assigned personnel.
5. Assemble and brief Branch Directors and Unit Leaders.
6. Participate in preparation of Incident Action Plan.
7. Identify service and support requirements for planned and expected operations.
8. Provide input to and review Communications Plan, Medical Plan, Traffic Plan and Vessel Routing Plan.
9. Coordinate and process requests for additional resources.
10. Review Incident Action Plan and estimate Section needs for next operational period.
11. Advise on current service and support capabilities.
12. Prepare service and support elements of the Incident Action Plan.
13. Estimate future service and support requirements.
14. Receive Demobilization Plan from Planning Section.
15. Recommend release of unit resources in conformance with Demobilization Plan.
16. Ensure general welfare and safety of Logistics Section personnel.
17. Maintain Unit/Activity Log.

FINANCE SECTION CHIEF / 45 CONS

The Finance/Administration Section Chief, a member of the General Staff, is responsible for all financial and cost analysis aspects of the incident and for supervising members of the Finance/Administration Section.

1. Review Common Responsibilities.
2. Attend briefing with responsible agency to gather information.
3. Attend planning meetings to gather information on overall strategy.
4. Determine resource needs.
5. Develop an operating plan for Finance/ Administration function on incident.
6. Prepare work objectives for subordinates, brief staff, make assignments, and evaluate performance.
7. Inform members of the Unified Command and General Staff when Section is fully operational.
8. Meet with assisting and cooperating agency representatives as required.

9. Provide input in all planning sessions on financial and cost analysis matters.
10. Maintain daily contact with agency(s) administrative headquarters on finance matters.
11. Ensure that all personnel time records are transmitted to home agencies according to policy.
12. Participate in all demobilization planning.
13. Ensure that all obligation documents initiated at the incident are properly prepared and completed.
14. Brief agency administration personnel on all incident related business management issues needing attention and follow-up prior to leaving incident.

1.2 TYPICAL OIL SPILL RESPONSE SCENARIO: The following scenario demonstrates the procedure that would be followed in the event of a release reaching navigable waters.

At 0640 an oil slick within Port Canaveral is reported to the CCAS Duty Officer by an outward bound boat. The slick, according to the boat captain, extends from mid-channel to the WATERS which is tied up at the NOTU pier. The tide is slack at the moment, however, ebb tide will commence within the hour. The first responders are notified by the duty officer at 0643. At 0655 the Duty Fire Chief dispatches a boom boat to investigate the slick and possible source.

Investigation reveals a slick extending from a barge moored alongside WATERS out into the channel. At 0720 a second boom boat is dispatched towing 500 feet of containment boom, with tow bridles on each end. The two boats form a "U" configuration in an attempt to contain the slick. At 0730 the Fire Chief notifies the Incident Commander that most of the oil spill is being contained. Concurrently, the J-BOSC Cleanup Team is being activated. In the meantime, it is determined that the barge is still leaking oil and the tide is now starting to ebb. As members of the Facility Response Cleanup Team arrive, they are sent to launch boats and rig additional containment boom in preparation for 360° booming of the leaking barge.

In the meantime the two boats from the first response team forming the U-tow report that some of the oil (plus that still leaking from the barge) has escaped and is now moving with the outward bound current, and they request additional manpower and equipment on-scene. Also concurrently, the CCAS Duty Office is making the required notifications to ESC. ESC then makes notification to CES/CEV who in turn makes notification to the National Response Center, the local U. S. Coast Guard M. S. O., NOTU, MSC, and the State of Florida Department of Environmental Protection.

Concurrently with the booming of the barge and WATERS, the CCAS vacuum truck is brought alongside the WATERS to start recovering the contained oil. Upon completion of booming the leaking vessel, the Facility Response Team will start implementing a preventive booming strategy while the original team towing the "U" configuration

continues to collect all the oil it can bringing it to the dock area for the Vacuum Truck to pick up. One of the CCAS Basic Ordering Agreement (BOA) Contractors, Florida Spill Response is contacted to also respond. They will be used as appropriate when they arrive.

Preventive booming strategy in this instance would probably consist of the following:

1. Placing a boom across the Central Turning Basin to prevent oiling of that basin.
2. Placing a boom across the Trident Turning Basin to prevent oiling of that basin.
3. Requesting that the Coast Guard close the Port and placing a boom at an angle across the channel to direct any sheen or oil to the shore where it can be picked up.

By this time, the full 45 SW ICS team has been activated and additional resources will be activated as required.

2.0 EMERGENCY NOTIFICATION PHONE LIST:

TABLE FRP 2.1: EMERGENCY NOTIFICATION PHONE LIST			
PRIORITIZED CONTACT LIST	RESPONSE ROLE	DAY PHONE	24 HOUR PHONE
Immediate Response Team Dispatcher Fire Department:	First Responders	Off Base, notification should be made by calling (407) 853-0911 On Base, notification should be made by calling 911	
CCAS Commander Name: Duty Officer	Incident command and control Facility Qualified Individual		
Deputy Facility Incident Commander Name:	Assist with Incident command and control "worst case" response. Alternate Facility Qualified Individual		
Facility Response/Cleanup Team J-BOSC	Mitigate and Cleanup spills	407-853-9373	407-853-9373
The following notifications will be made by the Command Duty Office following notification of the CCAS Commander			
NATIONAL RESPONSE CENTER	Receiver of all spill reports and notifier of appropriate FOSC	800-424-8802	800-424-8802
U.S.C.G - MSO - Port Canaveral	Federal On Scene Commander	407-853-7601	407-868-4250
Naval Ordnance Test Unit (NOTU): Dockmaster Point of Contact: Command Duty Officer	Provide additional equipment and personnel resources	(407) 853-1240	(407) 853-1240
Military Sealift Command (MSC) Point of Contact: LCDR Janice M. Wynn	Provide additional equipment and personnel resources	(407) 494-7612	
Local Response Contractor: Cape Canaveral Marine Services Point of Contact:	Provide additional equipment, personnel resources, and response expertise	(407) 868-0670	(407) 868-0670
Local Response Contractor: Florida Spill Response Point of Contact:	Provide additional equipment, personnel resources, and response expertise	(407) 631-7778	(407) 631-7778 (800) 282-4584
Local Response Contractor: Coastal Fuel Point of Contact:	Provide additional equipment, personnel resources, and response expertise	(407) 683-7778	(800) 282-4584
Oil Spill Cooperative Name: Jerry M. Simon Point of Contact: Canaveral Port Authority	Provide additional equipment and personnel resources	(407) 783-7831 FAX (407) 784-6223	(407) 783-7831
State of Florida, Department of Environmental Protection Point of Contact: Jacksonville	Incident reporting	(904) 413-9911	(904) 413-9911

2.1 SPILL RESPONSE NOTIFICATION FORM:

Spill Response Notification Form National Response Center 1-800-424-8802

Note: It is not necessary to wait for all information before calling the NRC

TABLE FRP 2.2: SPILL RESPONSE NOTIFICATION FORM	
REPORTER INFORMATION	
Reporter's Name	
Last	
First	
Reporter's Phone Number	(407) 494-7642
Company	United States Air Force
Organization Type	
Position	
Address	Street: CCAS
	City: Cape Canaveral
	State: Florida
	Zip Code: 32920
Were Materials Released	<input type="checkbox"/> YES <input type="checkbox"/> NO
Confidential	<input type="checkbox"/> YES <input type="checkbox"/> NO
Time Call Received	(use 24 hour time)

TABLE FRP 2.2: SPILL RESPONSE NOTIFICATION FORM

INCIDENT DESCRIPTION

Source and/or Cause of Incident			
Date			
Time of Incident	(use 24 hour time)		
Incident Address/Location			
Nearest City			
County			
State			
Zip Code			
Distance from City (miles)			
Section			
Township			
Range			
Container Type			
Tank Capacity (include units)			
Facility Capacity (include units)			
Facility Latitude	28 Degrees	24 Minutes	06 Seconds
Facility Longitude	80 Degrees	35 Minutes	00 Seconds
Weather Conditions			
Material Released	CHRIS Code -		
<input type="checkbox"/> YES			
<input type="checkbox"/> NO			
	Quantity Released	(include units)	
	Material Released into Water	<input type="checkbox"/> YES	<input type="checkbox"/> NO
	Quantity Released into Water	(include units)	

TABLE FRP 2.2: SPILL RESPONSE NOTIFICATION FORM

RESPONSE ACTIONS

Actions Taken to Correct Incident

Actions Taken to Control Incident

Actions Taken to Mitigate Incident

TABLE FRP 2.2: SPILL RESPONSE NOTIFICATION FORM

IMPACT

Number of injuries	
Number of deaths	
Evacuation(s) Required	<input type="checkbox"/> YES <input type="checkbox"/> NO
Number Evacuated	
Was There Any Damage	<input type="checkbox"/> YES <input type="checkbox"/> NO
Damage in Dollars (estimated)	
Medium Affected	
Description of Affect	
Additional Information about Medium	
Additional Information	
Any information about the incident not recorded elsewhere in the report	

CALLER NOTIFICATIONS

EPA	<input type="checkbox"/> YES <input type="checkbox"/> NO
USCG	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other (List)	<input type="checkbox"/> YES <input type="checkbox"/> NO

Following the initial response notifications a Natural Resource Damage Assessment (NRDA) must be conducted. For further information please see Section 13 of this document.

2.2 FACILITY RESPONSE PERSONNEL:

FACILITY RESPONSE PERSONNEL RESOURCES

Due to both the confidentiality of CCAS personnel phone numbers and their constant changing, up-to-date lists are posted within the Command Duty Section and at the contractor Facility Response Team office which are manned 24 hours a day. The phone number for this office is 911 or 853-0911 (cell phone or off-base).

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2.3 EQUIPMENT LIST:

TABLE FRP 2.3: ON-SITE INVENTORY: VACUUM TRUCK		
TOPIC		TRUCK TYPE 1
PICK-UP HEAD TYPE (manta, weir, etc.)		Wand/strainer
RECOVERY RATE	HEAD NOMINAL (gal/min)	8.5 in Hg 35 psi
	DE-RATED DAILY (gal/day)	
	DE-RATED DAILY (bbl/day)	
	TANK SIZE (gal)	2000
MANUFACTURER	BRAND	International
	MODEL	Isometrics/287T2000 (Medium Series 4000)
	YEAR	1994
MOBILIZATION	POINT OF CONTACT DAY PHONE 24-HOUR PHONE	Kathy Anderson 853-4585 911
	STORAGE LOCATION	Hangar R (Facility 1708)
UPKEEP	OPERATIONAL STATUS	In Service
	INSPECTION FREQUENCY	Annually With 6000 mile maintenance
	DATE OF LAST INSPECTION	12/98
TOTAL DE-RATED DAILY RECOVERY AVAILABLE ON-SITE FROM VACUUM TRUCKS (BBL/DAY):		
COMMENTS:		
NOMINAL RATES: (National Strike Force Coordination Center (NFESC)-supplied trucks) manta head 120 gal/min weir head 80 gal/min Pick-up head determines rate regardless of how fast truck can pump.		Given nominal rates, this table has math capability to calculate de-rated rates and total de-rated rate. bbl = 42 gal day = 1440 min

Last updated: January 1999

TABLE FRP 2.4: ON-SITE INVENTORY: BOOM		
TOPIC		Boom Type
TYPE	CLASS (permanent, I, II, etc.)	Class II boom
	Amount of boom	Over 10,000 feet
	SKIRT SIZE (18", 24", etc.)	24 inches
	STANDARD SECTION LENGTH (ft)	50 feet
	END CONNECTORS (ASTM, Navy)	Navy connectors and "Z" connectors
UPKEEP	OPERATIONAL STATUS	All boom in excellent condition
	INSPECTION FREQUENCY	Monthly and/or after each use
	DATE OF LAST INSPECTION	Monthly and/or after each use
COMMENTS:		

Last updated: January 1999

TABLE FRP 2.5: ON-SITE INVENTORY: SORBENTS (STOCKPILED)						
STOCKPILED ITEM	NATIONAL STOCK NUMBER	STOCKPILE LOCATION	PURCHASE UNIT	SORPTION CAPACITY (gal/unit)	STOCK ON HAND (units)	STOCKING GOAL (units)
Sorbent Boom (white)	9330-01-281-0337	55120/55122	60-ft package	90	5	
		K7-114			.5	
Sorbent Boom (green)	9330-01-334-5036	55120/55122	60-ft package	90	12	
Sorbent Pad (34x38")	9330-01-336-5074	55120/55122	Bale	81	32	
Sorbent Pad (17x19")	9330-01-219-7414	55120/55122	Bale	43.5	13	
Sorbent Pillow	open purchase	55120/55122	Bale	6	28	
Sorbent Roll		55120/55122	Roll	45	15	
		K7-114			7	
TOTAL SORPTION CAPACITY ON HAND (GAL):				5891		
COMMENTS:						

Last updated: January 1999

TABLE 2.6: ON-SITE INVENTORY: COMMUNICATIONS EQUIPMENT

TYPE	ASSIGNED TO	CALL SIGN OR PHONE NUMBER	PRIMARY NETWORK OR FREQUENCY	BRAND AND MODEL (year, if available)	CHARGER OR STORAGE LOCATION	OP STATUS
HANDHELD RADIOS	Chief 2	Chief 2	13, 16	Motorola Saber	Station 1	
	Division 1	Division 1	13, 16	Motorola Saber	Station 1	
	Battalion 1	Battalion 1	13, 16	Motorola Saber	Station 1	
	Training	Training	13, 16	Motorola Saber	Training	
CAR/TRUCK RADIOS	Chief 2	Chief 2	Multiple	Motorola Saber	Station 1	
	Division 1	Division 1	Multiple	Motorola Saber	Station 1	
	Battalion 1	Battalion 1	Multiple	Motorola Saber	Station 1	
BASE STATION RADIOS	Com Center	Fire Control	Multiple	Motorola Saber	Facility 49750	
CELLULAR PHONES	Chief 2	749-4867	na	Motorola	Chief 2 Vehicle	
	Division 1	749-6384	na	Motorola	Division 1 Vehicle	
			na			
OTHER:						

POINT OF CONTACT: Division 1

DAY PHONE: 853-9253

24-HOUR PHONE: 853-9253

COMMENTS:

WARNING: ONLY "INTRINSICALLY SAFE" HANDHELD RADIOS AND RECHARGEABLE BATTERY PACKS SHOULD BE USED AT OIL SPILLS. A radio is "intrinsically safe" only if BOTH the radio and battery pack are "intrinsically safe."

This inventory table functions both as an On-Site Inventory and as part of the Communications Plan. "Intrinsically safe" Motorola handheld radios and battery packs are marked with a green dot on the back, at the junction of the radio body and its battery pack; if BOTH dots are not present, the radio is not "intrinsically safe."

Last updated: January 1999

2.4 DISPERSANTS:

The Navy is researching the use of non-mechanical oil recovery techniques. However, current Department of Defense policy prohibits the use of non-mechanical oil recovery methods. If this policy should change in the future, this plan will be updated to address the additional capabilities and resource impacts.

2.5 EVACUATION PLANS:

In the event that evacuation is required, it will be carried out according to the CCAS evacuation plan. Refer to 45 SW OPLAN 32-3, Volume 1.

2.6 QUALIFIED INDIVIDUAL'S DUTIES:

Under the Department of Defense two-tiered planning concept, the Facility Qualified Individual has full authority and the duty, as described below, to respond to facility oil and hazardous substance spills, until relieved by the RQI/RIC. As outlined in the NCP, the predesignated RQI/RIC is the Federal On-Scene Coordinator for hazardous substance (HS) spills originating from Department of Defense shore facilities or vessels. Under Department of Defense policy, the FQI/FIC has full authority and responsibility to coordinate the response to all oil spills under the direction of either the predesignated EPA or USCG FOSC. The QI/IC reports directly to the RIC.

TABLE FRP 2.7: FQI/FIC & ALTERNATE'S AUTHORITY		
ITEM	LIMITS	
Contracting	<input checked="" type="checkbox"/>	UNLIMITED
	<input type="checkbox"/>	WARRANT LIMIT: LIST _____
	<input type="checkbox"/>	OTHER: LIST _____
Funding		LIMIT:
Evacuation	<input checked="" type="checkbox"/>	UNLIMITED ON BASE
	<input type="checkbox"/>	LIMITED OFF BASE (Describe Limits)
Access to other DOD Components	<input checked="" type="checkbox"/>	UNLIMITED
	<input type="checkbox"/>	UNLIMITED W/CONCURRENCE OF RIC
	<input type="checkbox"/>	LIMITED W/CONCURRENCE OF RIC (Describe Limits)
Coordination with Federal OSC	<input type="checkbox"/>	UNLIMITED
	<input checked="" type="checkbox"/>	UNLIMITED W/CONCURRENCE OF RIC
	<input type="checkbox"/>	LIMITED W/CONCURRENCE OF RIC (Describe Limits)
Coordination with State Regulators	<input checked="" type="checkbox"/>	UNLIMITED
	<input type="checkbox"/>	UNLIMITED W/CONCURRENCE OF RIC
	<input type="checkbox"/>	LIMITED W/CONCURRENCE OF RIC (Describe Limits)
Coordination with Press	<input checked="" type="checkbox"/>	UNLIMITED
	<input type="checkbox"/>	UNLIMITED W/CONCURRENCE OF RIC
	<input type="checkbox"/>	LIMITED W/CONCURRENCE OF RIC (Describe Limits)
Manage all response efforts per Federal OSC Direction	<input type="checkbox"/>	UNLIMITED
	<input checked="" type="checkbox"/>	UNLIMITED W/CONCURRENCE OF RIC
	<input type="checkbox"/>	LIMITED W/CONCURRENCE OF RIC (Describe Limits)

TABLE FRP 2.8: FACILITY QUALIFIED INDIVIDUAL'S & ALTERNATE'S DUTIES
PRE-SPILL DUTIES
<ul style="list-style-type: none"> • Develop a facility response plan to meet current regulations and to provide for adequate personnel and other resources necessary to respond to the average most probable facility spill. • Conduct sufficient number of drills to ensure that the response plan, personnel, and equipment is adequate and work as expected. • Review response plan at least annually to ensure that it remains up to date. • Ensure facility response personnel maintain mandatory training levels (OSHA, etc)
SPILL RESPONSE DUTIES
<ul style="list-style-type: none"> • Obtain initial incident briefing from the IRT. Characterize spill to obtain spill notification data. • Activate notification system to activate spill response management team Characterize the spill as to source, amount, and other items needed to make required notifications. • Contact RIC and provide spill brief. Request additional resources as needed. Ensure other appropriate notifications are made. • Make incompatibility/interaction assessment and notify proper response personnel • Assess the situation for possible direct and indirect health and safety hazards, environmental risks, and coordinate prompt rescue, response, removal, containment, diversion actions, and evacuation actions as outlined in the response plan. • Ensure that personnel safety is accorded highest priority. • Develop strategic objectives and response priorities • Ensure that spill event and response efforts, costs, orders, contracted personnel and equipment are properly documented. • Approve Incident Action Plans, site specific Health and Safety Plans, and other plans as needed. • Serve as primary contact with FOSC and state regulators • Attend unified command meetings with the FOSC and federal and state regulators • Manage overall response operations to ensure they are consistent with Department of Defense policy, federal, state, and local regulations, and the needs of impacted areas. • Review and approve resource allocation changes. • Monitor response effort and adjust as necessary • Serve as primary spokesperson with news media • Review and approve press releases • Make requests through the RIC for outside resources • Approve Demobilization Plan
AFTER SPILL DUTIES
<ul style="list-style-type: none"> • Develop spill report to determine strengths and weaknesses of plan, response effort, etc. • Amend plan based on lessons learned. • Review plan for deficiencies

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3.0 HAZARD IDENTIFICATION:

This section identifies the potential sources of spills at the Cape Canaveral Air Station and describes the facility's oil operations and associated oil storage and throughput volumes.

As described in Section 1.0, the following petroleum related activities take place at CCAS.

Air Force Controlled Petroleum Related Activities.

Petroleum storage tanks are listed in Volume V of this manual (Cape Canaveral Air Station Spill Prevention Control Countermeasures (SPCC) Plan. Of the tanks at CCAS, a 28,000 gallon tank storing RP-1 represents the greatest potential threat.

The skid strip at CCAS refuels various planes that land on the strip. In each of the three potential scenarios, the tank truck will not exceed 5,000 gallons of fuel.

A worst case crash from a launch (which is highly unlikely) could be an ATLAS rocket crashing in the water immediately after takeoff which carries 15,800 gallons of RP-1 and 20 gallons of hydrazine.

Two Launch Recovery Vessels homeported at CCAS do not handle petroleum except for their fuel tanks which are normally fueled elsewhere.

The Naval Ordnance Test Unit (NOTU) is a tenant at CCAS. Activities include:

Trident Wharf / Basin

Can conduct emergency fueling of submarines and/or vessels up to the size of cruisers alongside the wharf

Poseidon Wharf

Can conduct emergency fueling of submarine and/or vessels up to the size of cruisers alongside the wharf.

There is a small tank and associated piping near the wharf from which vessels can pump out their bilges, as necessary.

Army Wharf

Can conduct emergency fueling of Submarine and/or vessels up to the size of Cruisers which moor at the wharf.

Periodically transfer various products to vessels which can include hypergolic fuels such as OTTO II and Hydrazine.

The Military Sealift Command Office (MSC) also is a tenant at CCAS.

Homeported vessels include:

VANGUARD
HAYES
SEA MARK III
SEA CORE

Military Traffic Management Command (MTMC) load and unload various cargoes at the Army Wharf in the Central Turning basin:

There is little direct operational interface with MTMC and CCAS.
Periodically MTMC will use the Army Wharf to load various materials on vessels.

3.1 VULNERABILITY ANALYSIS

3.1.1 RESPONSE PLANNING DISTANCES AND SENSITIVE AREA IDENTIFICATION.

FRP Appendix C, Table C 1.6, contains the derivation of the response planning distances. Table FRP 3.1 summarizes the FRP response planning distances. Table FRP 3.5 contains the prioritized list of environmentally and economically sensitive areas within the FRP response planning distances. The sensitive areas and the priorities for protection are in accordance with the ACP.

TABLE FRP 3.1: FACILITY RESPONSE PLANNING DISTANCE			
OIL TYPE	I.D. OF NAVIGABLE WATER	CONDITION/TIDE CYCLE	DISTANCE IN MILES FROM FACILITY
I	Nearshore/Shoreline	Flood/Ebb	Within 5 miles
Type I oil refers to non-persistent oils. For a more detailed definition refer to Section 15.			

3.1.2 IDENTIFICATION OF VULNERABLE AREAS AND RISK OF IMPACT

This section has been prepared to coordinate with **Jacksonville Area Contingency Plan**. The booming strategies and collection points are to be used as a first response decision making tool. The priorities have been placed on the areas according to the Environmental Sensitivity Index (ESI) maps, field surveys and shoreline prioritization standards that have been adopted by the US scientific community. (See "Protection Priority Criteria", below, Table 3.2).

TABLE FRP 3.2: PROTECTION PRIORITY CRITERIA

The following list is a protection priority criteria on which the ACP priority for protection decisions are based:

High (A)	Medium (B)	Low (C)
<ul style="list-style-type: none"> • Protection of public health • Storm drain outlets • Public drinking water intakes • Safety and health of response workers • Industrial water supplies potentially impacting public needs and /or safety • Endangered or threatened species and their habitats • National Estuarine Research Reserves • National Wilderness Areas • National Wildlife Refuges • State Wildlife Refuges and game management areas • Local or private wildlife refuge areas • Seasonal breeding, spawning, and nesting areas • Salt marshes • Freshwater marshes • Brackish marshes 	<ul style="list-style-type: none"> • National Parks, Monuments, and Seashores • State and County Parks • National Historic Register Sites • Commercial and recreational fisheries management areas • Sheltered rocky shores and seawalls • Exposed tidal flats • Gravel beaches and riprap • All other beaches • Other undeveloped land • Public parks, recreation areas, and facilities • Private recreation areas and facilities 	<ul style="list-style-type: none"> • Industrial water supply not potentially impacting public needs in and/or safety • Other tourist/recreation areas • Exposed vertical rocky shores and seawalls • Agricultural land • Other developed land • Industrial facilities

3.1.3 RESOURCES AT RISK

TABLE FRP 3.3: LIST OF ACP SENSITIVE AREAS AND AREAS OF ECONOMIC IMPORTANCE

PROTECTION SITE	ERAP-MAP	ACP-MAP
HIGH PRIORITIES (A):		
A144 – Port Canaveral (A1A Highway Bridges, South) (Banana River Aquatic Preserve)	Figure FRP-18.2 & 18.3	Chart 11476a (p. E-V-B-35) Chart 11478 (p. E-V-B-37)
A151 – Port Canaveral, East Entrance	Figure FRP-18.2 & 18.3	Chart 11476a (p. E-V-B-35) Chart 11478 (p. E-V-B-37)
A152 – Port Canaveral Barge Canal (West end on Banana River)	Figure FRP-18.2 & 18.3	Chart 11476a (p. E-V-B-35) Chart 11478 (p. E-V-B-37)

3.1.4 WILDLIFE OIL VULNERABILITIES

The following threatened and endangered species have been identified as inhabiting CCAS or within a fifty-mile radius

Reptiles

American alligator (*Alligator mississippiensis*)
Atlantic green turtle (*Chelonia mydas*)
Atlantic loggerhead turtle (*Caretta caretta*)
Eastern indigo snake (*Drymarchon corais couperi*)
Leatherback turtle (*Dermochelys coriacea*)

Birds

Arctic peregrine falcon (*Falco peregrinus tundrius*)
Bald eagle (*Haliaeetus leucocephalus*)
Florida scrub jay (*Aphelocoma coerulescens coerulescens*)
Least tern (*Sterna antillarum*)
Piping plover (*Charadrius melodus*)
Wood stork (*Mycteria americana*)

Mammals

Caribbean manatee (*Trichechus manatus*)
Southeastern beach mouse (*Peromyscus polinotus niveiventris*)

Plants

Giant Leather Fern (*Acrostichum danaeifolium*)
Curtis Milkweed (*Asclepias curtissii*)
Coconut Palm (*Cocos nucifera*)
Black Mangrove (*Avicennia germinans*)
Mosquito Fern (*Azola caroliniana*)
Beach Creeper (*Ernodea littoralis*)
Wild Coco (*Elophia alta*)
Broad-Leaved Spiderlily (*Hymenocallis latifolia*)
Dwarf Redbay (*Persea borbonia* var. *humilis*)
Prickly Pear Cactus (*Opuntia compressa*)
Prickly Pear Cactus (*Opuntia stricta*)
Royal Fern (*Osmunda regalis* var. *spectabilis*)
Beach Star (*Remirea maritima*)
Scaevola (*Scaevola plumosa*)
Wildpine Air Plant (Unnamed) (*Tillandsia simulata*)
Giant Wildpine; Giant Air Plant (*Tillandsia utriculata*)
Nodding Pinweed (*Lechea cernua*)
Sand-Dune Spurge (*Chamaesyce cumulicola*)
Satin-Leaf (*Chrysophyllum oliviforme*)
Hand Fern (*Ophioglossum palmatum*)

3.2 FACILITY SPILL HISTORY

TABLE FRP 3.4 FACILITY SPILL HISTORY				
DATE: 12-30-96	LOCATION: Trident Wharf	PRODUCT: Bilge Water	SPILL VOLUME (gal): 200 gallons	SPILL VOLUME INTO NAVIGABLE WATER (gal): 200 gallons
CAUSE/ACTIONS				
Cause: A fitting on a bilge line ruptured during a pumping operation while pumping bilge water from the vessel HAYES				
Effectiveness Of Secondary Containment: There was none at the time.				
Detection: Observed a sheen on the water.				
Effectiveness Of Monitoring Equipment: There was none				
Recovery & Cleanup Actions: A 100' x 1,000' boom was deployed around the area affected. Adsorbent pads were used to soak up the oil.				
Corrections To Prevent Reoccurrence: 1) Require that all bilge lines at the Trident Wharf are double walled. 2) Place all bilge lines above the Wharf instead of underneath for better visibility. 3) Require that ships always deploy a boom in the water surrounding the vessel whenever fueling or pumping operations occur.				
Enforcement Action: None				
DATE: 2-13-97	LOCATION: MACA Road Area	PRODUCT: Bilge Water	SPILL VOLUME (gal): over 500 gal	SPILL VOLUME INTO NAVIGABLE WATER (gal): small amount
CAUSE/ACTIONS				
Cause: Air release valve in bilge water force main was apparently left in open position and released oily bilge water to adjacent soil around the manhole and to a drainage canal.				
Effectiveness Of Secondary Containment: There was none				
Detection: Oily sheen on water				
Effectiveness Of Monitoring Equipment: None				
Recovery & Cleanup Actions: Soil dikes were placed across the canal at either end of the spill area. Booms were also placed at either end to contain the product. Sorbent pads and an oil skimmer were placed on the water surface to collect the free-floating product. Extent of contamination still being evaluated.				
Corrections To Prevent Reoccurrence: Potential actions to prevent this type of spill are still being evaluated.				
Enforcement Action: None				

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4.0 DISCHARGE PLANNING VOLUMES:

EPA-regulated Marine Transportation Related (MTR) facilities are required to develop oil spill scenarios based on the facility's tiered discharge planning volumes. The EPA OPA 90 implementing regulation requires complex facilities to compare the tiered discharge planning volumes computed under the EPA and USCG planning procedures and to plan for the greater volumes.

This FRP describes discharge scenarios to demonstrate plan implementation for the larger of the small or average most probable up to the maximum most probable or medium discharge planning volume. This plan has also defined the facility's worst case discharge planning volume for the RIC as required under the Department of Defense's tiered response strategy. The (Identification of the RIC plan) addresses the response to the worst case discharge at this facility. Appendix D contains the derivation of the discharge planning volumes for this FRP.

4.1 SMALL/AVERAGE MOST PROBABLE AND MEDIUM/MAXIMUM MOST PROBABLE DISCHARGES

TABLE FRP 4.1: DISCHARGE PLANNING VOLUMES

OIL TYPE	SIZE CLASSIFICATION	SPILL VOLUME
I	SMALL SPILL/AVERAGE MOST PROBABLE SPILL	2,100 gallons
	MEDIUM SPILL/MAXIMUM MOST PROBABLE SPILL	25,000 gallons

TABLE FRP 4.2: SMALL DISCHARGE SCENARIOS FOR TRANSFER FACILITIES

TRANSFER FACILITY		
POTENTIAL SPILL VOLUME: 2,100 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Tank overfill, misalignment of valves, hose rupture, gasket failure, human error.	
POSSIBLE CHAIN REACTION OF FAILURES	Very unlikely	
LOCATION OF MATERIAL SPILLED	The fluid would probably enter either the Central or Trident Turning Basin	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE	The spill would likely be contained within the turning basin, otherwise it would enter the Port Canaveral Channel. If not contained within the channel, it would then enter the Atlantic Ocean.	
POTENTIAL RECEIVING NAVIGABLE WATERS	Atlantic Ocean	
PROXIMITY OF SENSITIVE AREA/RESOURCES	Nearby sensitive sites consist of: A144 - Port Canaveral; A151 - Port Canaveral East Entrance; and A152 - Port Canaveral Barge Canal.	
Type I oil defined in Section 15, Definitions.		

TABLE FRP 4.3: SMALL DISCHARGE SCENARIOS FOR BULK OIL STORAGE FACILITY		
STORAGE TANK		
POTENTIAL SPILL VOLUME 1,000 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Tank rupture, gasket failure, human error	
POSSIBLE CHAIN REACTION OF FAILURES	Fuel would be contained within secondary containment.	
LOCATION OF MATERIAL SPILLED	On ground near tank	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE	Very unlikely fuel would move offsite	
POTENTIAL RECEIVING NAVIGABLE WATERS	Atlantic Ocean or Banana River	
PROXIMITY OF SENSITIVE AREA/RESOURCES	Nearby sensitive sites consist of: A144 - Port Canaveral; A151 - Port Canaveral East Entrance; and A152 - Port Canaveral Barge Canal.	
PIPELINES, VALVES AND OTHER TRANSFER EQUIPMENT		
POTENTIAL SPILL CAUSES	Not applicable to CCAS	
POSSIBLE CHAIN REACTION OF FAILURES		
LOCATION OF MATERIAL SPILLED		
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE		
POTENTIAL RECEIVING NAVIGABLE WATERS		
PROXIMITY OF SENSITIVE AREA/RESOURCES		

TABLE FRP 4.4: SMALL DISCHARGE SCENARIOS FOR DAY TANK SITES		
TANK		
POTENTIAL SPILL VOLUME 100 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Not applicable to CCAS	
POSSIBLE CHAIN REACTION OF FAILURES		
LOCATION OF MATERIAL SPILLED		
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE		
POTENTIAL RECEIVING NAVIGABLE WATERS		
PROXIMITY OF SENSITIVE AREA/RESOURCES		

TABLE FRP 4.5: MEDIUM DISCHARGE SCENARIOS FOR TRANSFER FACILITIES

TANK		
POTENTIAL SPILL VOLUME 25,000 gallons	TYPE OF OIL: Type 1	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Tank overflow, misalignment of valves, hose rupture, gasket failure, human error.	
POSSIBLE CHAIN REACTION OF FAILURES	Very unlikely	
LOCATION OF MATERIAL SPILLED	The fluid would probably enter either the Central or Trident Turning Basin	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE	The spill would likely be contained within the turning basin, otherwise it would enter the Port Canaveral Channel. If not contained within the channel, it would then enter the Atlantic Ocean.	
POTENTIAL RECEIVING NAVIGABLE WATERS	Atlantic Ocean	
PROXIMITY OF SENSITIVE AREA/RESOURCES	Nearby sensitive sites consist of: A144 - Port Canaveral; A151 - Port Canaveral East Entrance; and A152 - Port Canaveral Barge Canal.	

TABLE FRP 4.6 MEDIUM DISCHARGE SCENARIOS FOR BULK OIL STORAGE FACILITY

STORAGE TANK		
POTENTIAL SPILL VOLUME 25,000 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Tank rupture, gasket failure, human error	
POSSIBLE CHAIN REACTION OF FAILURES	Fuel would be contained within secondary containment.	
LOCATION OF MATERIAL SPILLED	On ground near tank	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE	Very unlikely fuel would move offsite	
POTENTIAL RECEIVING NAVIGABLE WATERS	Atlantic Ocean or Banana River	
PROXIMITY OF SENSITIVE AREA/RESOURCES	Nearby sensitive sites consist of: A144 - Port Canaveral; A151 - Port Canaveral East Entrance; and A152 - Port Canaveral Barge Canal.	
PIPELINES, VALVES AND OTHER TRANSFER EQUIPMENT		
POTENTIAL SPILL CAUSES	Not applicable to CCAS	
POSSIBLE CHAIN REACTION OF FAILURES		
LOCATION OF MATERIAL SPILLED		
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE		
POTENTIAL RECEIVING NAVIGABLE WATERS		
PROXIMITY OF SENSITIVE AREA/RESOURCES		

TABLE FRP 4.7: MEDIUM DISCHARGE SCENARIOS FOR DAY TANK SITES		
TANK		
POTENTIAL SPILL VOLUME 100 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Not applicable to CCAS	
POSSIBLE CHAIN REACTION OF FAILURES		
LOCATION OF MATERIAL SPILLED		
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE		
POTENTIAL RECEIVING NAVIGABLE WATERS		
PROXIMITY OF SENSITIVE AREA/RESOURCES		

4.2 WORST CASE DISCHARGE

TABLE FRP 4.9: WORST CASE DISCHARGE SCENARIOS FOR TRANSFER FACILITIES		
TANK		
POTENTIAL SPILL VOLUME 250,000 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Tank overfill, misalignment of valves, hose rupture, gasket failure, human error.	
POSSIBLE CHAIN REACTION OF FAILURES	Very unlikely	
LOCATION OF MATERIAL SPILLED	The fluid would probably enter either the Central or Trident Turning Basin	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE	The spill would likely be contained within the turning basin, otherwise it would enter the Port Canaveral Channel. If not contained within the channel, it would then enter the Atlantic Ocean.	
POTENTIAL RECEIVING NAVIGABLE WATERS	Atlantic Ocean or Banana River	
PROXIMITY OF SENSITIVE AREA/RESOURCES	Nearby sensitive sites consist of: A144 - Port Canaveral; A151 - Port Canaveral East Entrance; and A152 - Port Canaveral Barge Canal.	

TABLE FRP 4.10 WORST CASE DISCHARGE SCENARIOS FOR BULK OIL STORAGE FACILITY

STORAGE TANK		
POTENTIAL SPILL VOLUME 28,000 gallons	TYPE OF OIL: Type I	POTENTIAL FOR SPILL: Very low
POTENTIAL SPILL CAUSES	Tank rupture, gasket failure, human error	
POSSIBLE CHAIN REACTION OF FAILURES	Fuel would be contained within secondary containment.	
LOCATION OF MATERIAL SPILLED	On ground near tank	
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE	Very unlikely fuel would move offsite	
POTENTIAL RECEIVING NAVIGABLE WATERS	Atlantic Ocean or Banana River	
PROXIMITY OF SENSITIVE AREA/RESOURCES	Nearby sensitive sites consist of: A144 - Port Canaveral; A151 - Port Canaveral East Entrance; and A152 - Port Canaveral Barge Canal.	
PIPELINES, VALVES AND OTHER TRANSFER EQUIPMENT		
POTENTIAL SPILL VOLUME	TYPE OF OIL:	POTENTIAL FOR SPILL:
POTENTIAL SPILL CAUSES	Not applicable to CCAS	
POSSIBLE CHAIN REACTION OF FAILURES		
LOCATION OF MATERIAL SPILLED		
SPILL PATHWAYS AND LIKELIHOOD OF SPILL TRAVELING OFFSITE		
POTENTIAL RECEIVING NAVIGABLE WATERS		
PROXIMITY OF SENSITIVE AREA/RESOURCES		

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5.0 SPILL DETECTION CAPABILITIES

The spill detection capabilities described in this section determine Cape Canaveral Air Station's ability to detect or discover spills. The initial goal of a response is to stop the flow and deploy resources to recover oil and minimize harm to the environment. Prompt detection of spills is critical.

5.1 DISCHARGE DETECTION BY PERSONNEL

Security patrols constantly monitor all areas of the CCAS. Any discharge by security or CCAS personnel will be immediately reported. During any transfer or fueling operations at the docks, both the terminal person in charge and the vessel person in charge will monitor nearby water areas to verify that no sheen is present.

5.2 AUTOMATED DISCHARGE DETECTION

The tanks at the main fuel station are equipped with high level alarms, in addition to a computer monitoring system.

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6.0 RESPONSE RESOURCES:

This section identifies the response resources required to respond to the small, medium, and worst case planning volumes determined under the EPA and USCG OPA 90 regulations.

Each of the tables below identifies and demonstrates accessibility to one of the three types of response resources that must be addressed in accordance with 40 CFR 112 Appendix F and 33 CFR 154 Appendix C: oil recovery devices, boom, and temporary storage equipment. Each table states the regulatory requirements for each tiered discharge planning volume and describes how the requirements will be met.

See Appendix C of this FRP for the basis and derivations of the discharge planning volumes and response capability requirements.

6.1 EQUIPMENT RESOURCES REQUIRED BY OPA 90

TABLE FRP 6.1: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR SMALL DISCHARGE				
OIL RECOVERY REQUIREMENT		• Daily Recovery Rate: (Small/Average Most Probable Discharge Volume) = 2,100 gal/day • On Scene Within 2 Hrs Of Detection		
FACILITY OIL RECOVERY EQUIPMENT AVAILABLE TO MEET REQUIREMENT		EQUIPMENT		DERATED CAPACITY (gal/day)
		Vacuum Truck		Over 5,000 gal/day
		TOTAL DERATED CAPACITY (gal/day)		Over 5,000 gal/day
SOURCE/LOCATION OF EQUIPMENT AND DEPLOYMENT TIME		The Vacuum Truck is parked near the Central Turning Basin. Deployment time will be less than one hour.		
BOOM REQUIREMENTS		NTR: • 1,000 Linear Ft • Means Of Immediate Deployment MTR: • 2 X Length Of Longest Vessel - 600 Ft • Means Of Deploying And Anchoring Boom Available At Facility Within 1 Hr Of Spill Detection		
FACILITY BOOMS AVAILABLE TO MEET REQUIREMENTS		BOOM TYPE		TOTAL LENGTH (ft)
		Type II Boom (over 24")		20,000
SOURCE/LOCATION OF BOOMS AND DEPLOYMENT TIME		Boom is stored on trailers at and near Central and Trident Turning Basins		
TEMPORARY OIL STORAGE EQUIPMENT REQUIREMENTS		• 2 X Required Daily Oil Recovery Rate- 4,200 gal/day • On Scene Within 2 Hrs Of Spill detection		
FACILITY TEMPORARY OIL STORAGE EQUIPMENT TO MEET REQUIREMENTS		EQUIPMENT		TOTAL CAPACITY (gal)
		Empty tanks		5,000
		AVAILABLE CAPACITY (gal/day)		5,000
SOURCE/LOCATION OF STORAGE EQUIPMENT AND DEPLOYMENT TIME		Various places within the CCAS complex		
		NO. OF AVAILABLE DAYS		
				> 60 days
				> 60 days

TABLE FRP 6.2: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR MEDIUM DISCHARGE

OIL RECOVERY REQUIREMENT	<ul style="list-style-type: none">Daily Recovery Rate: 12,500 gal/dayOn Scene Within 12 Hrs Of Detection			
FACILITY OIL RECOVERY EQUIPMENT AVAILABLE TO MEET REQUIREMENT	EQUIPMENT	DERATED CAPACITY (gal/day)		
	Vacuum Truck	5,000 gal/day		
	Hyd Disk Skimmer	50 gal/day		
	TOTAL DERATED CAPACITY (gal/day)	5,050 gal/day		
SOURCE/LOCATION OF EQUIPMENT AND DEPLOYMENT TIME	Stored near Central turning basin			
FACILITY SHORTFALL	ADDITIONAL DERATED CAPACITY (gal/day)	SOURCE	TIME	
7,500 gal/day	7,500	Local coop	< 2 hours	
	TOTAL ADDITIONAL DERATED CAPACITY (gal/day)	<ul style="list-style-type: none">7,500 gal/day		
BOOM REQUIREMENTS	<ul style="list-style-type: none">Sufficient Quantities For Oil Collection, Containment And Protection Of Sensitive AreasOn Scene Within 12 Hrs Of Detection			
FACILITY BOOMS AVAILABLE TO MEET REQUIREMENTS	BOOM TYPE		TOTAL LENGTH (ft)	
	Type II boom (greater than 24")		20,000 feet	
SOURCE/LOCATION OF BOOMS AND DEPLOYMENT TIME	Stored on boom trailers in and near Central and Trident Turning Basin			
TEMPORARY OIL STORAGE EQUIPMENT REQUIREMENTS	<ul style="list-style-type: none">2 X Required Daily Oil Recovery Rate-50,000 gal/dayOn Scene Within 6 Hrs Of Detection (In Higher Volume Port Areas and Great Lakes)/12 Hrs Of Detection (In All Other Areas)			
FACILITY TEMPORARY OIL STORAGE EQUIPMENT TO MEET REQUIREMENTS	EQUIPMENT	TOTAL CAPACITY (gal)	CAPACITY (gal/day)	NO. OF AVAILABLE DAYS
	Empty tanks	50,000	50,000	> 60 days
	AVAILABLE CAPACITY (gal/day)		50,000	> 60 days
SOURCE/LOCATION OF STORAGE EQUIPMENT AND DEPLOYMENT TIME	Various locations within the CCAS complex			

TABLE FRP 6.3: MINIMUM REQUIRED OIL RECOVERY, CONTAINMENT AND TEMPORARY STORAGE RESOURCES FOR WORST CASE DISCHARGE					
OIL RECOVERY REQUIREMENT					
NTR FACILITY			MTR FACILITY		
TIER 1 gal/day	TIER 2 gal/day	TIER 3 gal/day	TIER 1 gal/day	TIER 2 gal/day	TIER 3 gal/day
7,500	12,500	20,000	7,500	12,500	20,000
ON SCENE TIER TIMES (hrs)			ON SCENE TIER TIMES (hrs)		
12	36	60	12	36	60

TABLE FRP 6.4: FACILITY OIL RECOVERY EQUIPMENT TO MEET REQUIREMENT			
FACILITY TIER	EQUIPMENT	DERATED CAPACITY (gal/day)	ON SCENE TIME (hrs)
TIER 1	See Source/Location below		< 2 hrs
	TOTAL DERATED CAPACITY (gal/day)	7,500	
TIER 2	See Source/Location below		< 6 hrs
	TOTAL DERATED CAPACITY (gal/day)	12,500	
TIER 3	See Source/Location below		<24 hrs
	TOTAL DERATED CAPACITY (gal/day)	40,000	
SOURCE/LOCATION OF EQUIPMENT	CCAS can meet the Tier recovery requirements by first using their Vacuum Truck and small skimmer. Additional skimmers will then be obtained from the Port Canaveral-Brevard County Spillage Cleanup Committee, Inc. If additional skimming is required, CCAS will call Florida Spill Response which is OSRO rated by the USCG, which means they are able to recover over 40,000 gals of oil per day.		

TABLE FRP 6.5: BOOM REQUIREMENTS			
<ul style="list-style-type: none"> Sufficient Quantities For Oil Collection, Containment, And Shoreline Protection On Scene Within Specified Tiered Response Times 			
BOOM TYPE	PURPOSE		REQUIRED (ft)
Type II boom (24 inch)	General purpose, nearshore/calm water boom		6,000 ft
FACILITY BOOMS AVAILABLE TO MEET REQUIREMENTS	BOOM TYPE	PURPOSE	LENGTH (ft)
	Type II	Containment & shoreline protection	20,000
SOURCE/LOCATION OF BOOMS AND DEPLOYMENT TIME	The boom is stored on trailers at and near the Central and Trident Turning Basin		

TABLE FRP 6.6: TEMPORARY OIL STORAGE REQUIREMENT			
TIER 1 gal/day	TIER 2 gal/day	TIER 3 gal/day	
15,000	25,000	40,000	
ON SCENE TIER TIMES (hrs)			
< 12 hours	< 36 hours	< 60 hours	

TABLE FRP 6.7: FACILITY OIL STORAGE EQUIPMENT TO MEET REQUIREMENT			
FACILITY TIER	EQUIPMENT	CAPACITY (gal/day)	ON SCENE TIME (hrs)
TIER 1	CCAS Storage tanks		< 12 hrs
	TOTAL CAPACITY (gal/day)	15,000	
TIER 2	CCAS Storage tanks		< 36 hrs
	TOTAL CAPACITY (gal/day)	25,000	
TIER 3	CCAS Storage tanks		< 60 hrs
	TOTAL CAPACITY (gal/day)	40,000	
SOURCE/LOCATION OF EQUIPMENT	Empty tanks suitable for storage are in place within the CCAS facility.		

6.2 IMPLEMENTATION OF RESPONSE ACTIONS

This section describes the implementation of this FRP for the small/average most probable and medium/maximum most probable discharges described in TAB 4.

As soon as a spill is reported, the Fire Department will respond. If a land spill, the Fire Department will monitor for explosion and fire hazard and contact J-BOSC Post-Emergency Spill Response Team which will contain the spill as required and make arrangements for disposal. If the spill is on or reaches water, the Fire Department will immediately deploy boom to contain the spill. If the spill cannot be contained at the source, a boom will be placed across the turning basin to prevent the oil from getting into the Port Canaveral Channel. If it is not possible to contain the oil within the basin, a boom will be placed diagonally across the channel at an appropriate place to bring the oil to shore where it can be recovered.

As soon as the Fire Department starts deploying the boom, the Fire Department will also notify the J-BOSC Shift Supervisor. J-BOSC will deploy more boom if necessary, recover the oil where possible, and take appropriate clean up and remedial action. If additional equipment is needed, it can be obtained from the Port Canaveral-Brevard County Spillage Cleanup Committee. A list of this equipment is provided in Appendix B. If still more help is required, local cleanup contractors will be contacted and if necessary, a request to utilize other local Navy assets.

6.3 DISPOSAL PLAN

Any oiled debris or recovered fluid will be temporarily stored in the event of a spill. Oiled debris will be placed in appropriate containers which are certified for containing hazardous materials.

Fluid will be placed in one (or more if necessary) of the empty tanks within the CCAS facility and a licensed contractor will be contacted for disposal as appropriate.

6.4 CONTAINMENT AND DRAINAGE PLANNING

Every feasible attempt will be made to contain a spill on land to prevent it from reaching water or penetrating the ground and reaching the water table. As soon as the Fire Department has ensured that there is no explosion hazard, the fuel will be pumped or sorbed if possible and put in appropriate containers. If necessary, dikes or berms will be placed to prevent the fuel from spreading. Once a spill is contained, the CCAS Vacuum Truck will be used to pick up any free fluid which will be stored in an empty tank until arrangements can be made for a licensed contractor to dispose of it properly.

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7.0 SELF INSPECTION

As a normal part of the Fire Department routine, the response vessels, boom and other immediate response equipment is inspected on a monthly basis. The contractor Facility Response Team also inspects the boat and boom each time it is deployed as vessels move in and out.

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8.0 TRAINING PROCEDURES

The United States Coast Guard (USCG) has developed a set of voluntary training guidelines for oil pollution responders. The guidelines contain the recommended training subject areas for personnel involved in oil spill response and cleanup. The training is divided into two categories, one for non-supervisory operation personnel and the other for supervisory operational personnel.

The intent of the training guideline document is for professional trainers to use the USCG guidelines to develop specific lesson plans on the subject areas listed in the knowledge column of the guidelines.

In addition to the USCG requirements, the Occupational Safety and Health Administration (OSHA) has promulgated training requirements in 29 CFR 1910.120 that fully apply to oil spill cleanup operations.

The CG guidelines have been combined with the job description for each response person to determine what training is needed for that person to carry out his/her duties. Utilizing the above guidelines, the following has been incorporated into the training that is given to the Fire Department and Facility Response Team personnel.

TABLE FRP 8.1: POSITION TITLE: Incident Commander & Deputy Incident Commander (45SW/CC)		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Notify appropriate authorities and alert key personnel according to response plan	<ul style="list-style-type: none"> • Facility plan • Notification of authorities • Cleanup resources • How and when to mobilize resources 	Demonstrate practical activation of plan
Initiate response	<ul style="list-style-type: none"> • Baseline survey techniques and requirements • Contracting procedures • Salvage/mitigation • Liability issues • Equipment uses and limitations • Funding sources • Natural resource damage assessment • Statutory/regulatory requirements 	Identify and coordinate immediate response activities
Assess size, product, source, and magnitude of spill	<ul style="list-style-type: none"> • Metric/US conversions • Estimating spill volumes • Physical oil types and API ratings • Basic physical chemistry of oil and petroleum products 	<ul style="list-style-type: none"> • Estimate spill sizes • Determine spill source • Convert metric units to US units • Assess potential political/economic, social significance of a spill • Identify spilled product
Hazard recognition	<ul style="list-style-type: none"> • Marine Safety Data Sheets • Basic toxicology • Fire and explosion hazards • Physical hazards, such as: <ul style="list-style-type: none"> - Slip, trip, fall - Heat stress - Vehicular hazards • Sampling instruments and techniques • Site characterization and analysis • Boom deployment • Small boat operations • Skimmer operations • Vacuum truck operations 	<ul style="list-style-type: none"> • Identify accident potential • Identify potential threat to personnel and the environment
Identify and prioritize resources at risk	<ul style="list-style-type: none"> • Shoreline types • Relative sensitivity of coastal types • Sensitivity mapping • Local geography • Local oceanography • Local infrastructure 	<ul style="list-style-type: none"> • Identify protection priorities • Identify cleanup priorities
Spill trajectory forecasting	<ul style="list-style-type: none"> • Influence of sea and weather conditions on oil and properties and slick behavior/spread rate • Estimating spill size • Trajectory model interpretation 	Use data to predict speed and direction of oil movement
Assess potential for recontamination	<ul style="list-style-type: none"> • Location of remaining oil in the environment or in the source • Trajectory modeling • Final survey techniques 	<ul style="list-style-type: none"> • Use spill projection models • Determine whether cleanup should be continued or terminated
Establish command post	<ul style="list-style-type: none"> • Site selection consideration: <ul style="list-style-type: none"> - infrastructure - logistics concerns - future expansion 	<ul style="list-style-type: none"> • Select appropriate command post site • Provide for logistics
Management of operational response activities	<ul style="list-style-type: none"> • Use and limitations of pollution control equipment/techniques • Logistics concerns <ul style="list-style-type: none"> - personnel - equipment - infrastructure 	<ul style="list-style-type: none"> • Direct and supervise: <ul style="list-style-type: none"> - securing source - chemical/biological treatment methods
Conduct briefings	<ul style="list-style-type: none"> • Briefing techniques 	<ul style="list-style-type: none"> • Conduct briefings for: <ul style="list-style-type: none"> - senior officers - subordinates - community - media

TABLE FRP 8.1: POSITION TITLE: Incident Commander & Deputy Incident Commander		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Conduct analysis to determine if response should be continued, suspended, or terminated with appropriate agencies	<p>Effort/benefit analysis</p> <p>Effort: manpower, equipment, and time requirements, environmental damage, area use interference</p> <p>Benefits: aesthetic benefits, environmental, economical, social water use benefits, address public pressures/concerns</p>	<ul style="list-style-type: none"> Rank the different criteria Use effort/benefit analysis method
Personnel management	<ul style="list-style-type: none"> Team leadership Time management Stress management Delegations methods 	<ul style="list-style-type: none"> Identify/define/assign tasks & expectations Monitor results
Conduct review of the response	<ul style="list-style-type: none"> Review response activities 	Conduct an effective and productive team review of response
Make recommendations for improved preparedness	<ul style="list-style-type: none"> Familiarity with existing contingency plan 	<ul style="list-style-type: none"> Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan Demonstrate analytical skills

Table FRP 8.2: POSITION TITLE: Operations Section Chief

Task Description	Have Knowledge in	Skill
Prepare incident reports	<ul style="list-style-type: none"> Preparing Standard Spill Reporting Forms 	
Gather and verify information	<ul style="list-style-type: none"> Operation and construction of various pollution sources, such as: <ul style="list-style-type: none"> vessels pipelines storage tanks truck fill rack rail car fill stands Using chart and tide tables Plotting skills Basic meteorology Local sensitivities <ul style="list-style-type: none"> economic social environmental 	Demonstrate ability to gather supporting data to initiate an appropriate response.
Assess size, product, source, and magnitude of spill	<ul style="list-style-type: none"> Metric/US conversions Estimating spill volumes Physical oil types and API ratings Basic physical chemistry of oil and petroleum products 	<ul style="list-style-type: none"> Estimate spill sizes Determine spill source Convert metric units to US units Assess potential political/economic, social significance of a spill Identify spilled product
Hazard recognition	<ul style="list-style-type: none"> Marine Safety Data Sheets Basic toxicology Fire and explosion hazards Physical hazards, such as: <ul style="list-style-type: none"> Slip, trip, fall Heat stress Vehicular hazards Sampling instruments and techniques Site characterization and analysis Boom deployment Small boat operations Skimmer operations Vacuum truck operations 	<ul style="list-style-type: none"> Identify potential threat to personnel and the environment. Identify accident potential
Identify and prioritize resources at risk	<ul style="list-style-type: none"> Shoreline types Relative sensitivity of coastal types Sensitivity mapping Local geography Local oceanography Local infrastructure 	<ul style="list-style-type: none"> Identify protection priorities Identify cleanup priorities
Spill trajectory forecasting	<ul style="list-style-type: none"> Influence of sea and weather conditions on oil and properties and slick behavior/spread rate Estimating spill size Trajectory model interpretation 	Use data to predict speed and direction of oil movement
Identify resources required to respond	<ul style="list-style-type: none"> Use and limitations of: <ul style="list-style-type: none"> dispersants tracking systems booms skimmers pumps portable storage chemical barriers sorbents bioremediation communications equipment shoreline cleanup equipment in-situ-burning 	<ul style="list-style-type: none"> Selection of proper equipment for the given circumstances Determine personnel resources needed Determine surveillance requirements
Conduct briefings	<ul style="list-style-type: none"> Briefing techniques 	<ul style="list-style-type: none"> Conduct briefings for: <ul style="list-style-type: none"> 0

Table FRP 8.2: POSITION TITLE: Operations Section Chief

Task Description	Have Knowledge in	Skill
Assess potential for recontamination	<ul style="list-style-type: none"> • Location of remaining oil in the environment or in the source • Trajectory modeling • Final survey technique 	<ul style="list-style-type: none"> • Use spill projection models • Determine whether cleanup should be continued or terminated
Shut down field operations	<ul style="list-style-type: none"> • Updated inventory and location of equipment and personnel • Procedures to terminate operations 	Describe how the operations should be terminated in an orderly manner
Provide information documentation and evidence to final operations report	<ul style="list-style-type: none"> • Daily report/chronological report • Maps, charts, or diagrams • Message traffic, telex, radio logs, fax • Shoreline survey evaluation form • Photographic documentation 	Conduct an effective and productive team review of response
Personnel management	<ul style="list-style-type: none"> • Team leadership • Time management • Stress management • Delegations methods 	<ul style="list-style-type: none"> • Identify/define/assign tasks & expectations • Monitor results
Make recommendations for improved preparedness	<ul style="list-style-type: none"> • Familiarity with existing contingency plan 	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE FRP 8.3: POSITION TITLE: Recovery/Protection Unit Leader and Team Member

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Resource Protection	<ul style="list-style-type: none"> • Deploy deflection and/or containment boom • Deploy sorbent materials • Construct dikes and/or dams • Report on the effectiveness of booming/diking arrangements • Identify protection resource needs, such as: <ul style="list-style-type: none"> - boom types - boom lengths - mooring systems - anchor buoy and lights - vessel support equipment 	<ul style="list-style-type: none"> • Boom deployment • On shore recovery and containment techniques
Assist in initial assessment of spill and potential impacts	<ul style="list-style-type: none"> • Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures 	<ul style="list-style-type: none"> • Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Hazard recognition	<ul style="list-style-type: none"> • Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards 	Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	<ul style="list-style-type: none"> • Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations 	<ul style="list-style-type: none"> • Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Identify and stop discharge at the source	<ul style="list-style-type: none"> • Causes of spills • Options to stop oil/product flow 	Assist in selection control measures
Identify response priorities and select counter measures	<ul style="list-style-type: none"> • Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring, confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements 	<ul style="list-style-type: none"> • Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Response cleanup requirements on an ongoing basis	<ul style="list-style-type: none"> • Operational efficiency of equipment and alternative resources • Changing oil properties and environmental factors • New information 	Apply changing data to the selection of cleanup equipment and to the choice of response effect locations to optimize operations
Take samples from source and slick	<ul style="list-style-type: none"> • Legal sampling methods • Properties of oils (e.g., specific gravity, viscosity, pour point, flash point, solubility) 	Demonstrate knowledge of all types, grades, physical, and chemical properties of oils
Forecast slick transport and spreading	<ul style="list-style-type: none"> • Effect of oil properties, sea state and weather on spread rate and transport • Spill volume as a function of slick area, thickness, and appearance • Trajectory modeling • Implications to countermeasures operations 	Estimate spill volume and direction of movement

TABLE FRP 8.3: POSITION TITLE: Recovery/Protection Unit Leader and Team Member

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Identify the effect of weathering on response operations, hazards, and impacts	<ul style="list-style-type: none"> Weathering processes: evaporation, dissolution, emulsification, biodegradation, sedimentation Effect of weather, sea state, and oil type on weathering Fire hazards Implications to countermeasures operations 	Assess effect of environmental conditions on oil and product
Implement safety procedures	<ul style="list-style-type: none"> Safety checklist for response operations Safe work practices: cleanup equipment, petroleum products, site Personal protective clothing and equipment Capability of personnel; length of shift, level of training 	<ul style="list-style-type: none"> Recognize need for and properly use personnel protective clothing and equipment Prevent unsafe worker performance
Take appropriate site security measures	<ul style="list-style-type: none"> Implement site security and access restrictions 	<ul style="list-style-type: none"> Use safety equipment Ensure security of work site
Assess transportation needs	<ul style="list-style-type: none"> Ongoing transportation needs of all cleanup phases 	Determine transportation requirements
Choose appropriate response vessels	<ul style="list-style-type: none"> Capabilities of available small boats Safe deployment and operation of boats Navigation of small boats Effects of environmental factors on vessel operations 	<ul style="list-style-type: none"> Select appropriate means of transportation Operate vessels safely and effectively
Use of communications equipment	<ul style="list-style-type: none"> Response information and communications needs Portable UHF/VHF radios and cellular telephones Radio operations protocols and use 	Communicate effectively to facilitate response
Select appropriate boom	<ul style="list-style-type: none"> Main uses of boom: containment, deflection, and protection Boom components and structure Types of commercial and improvised booms: skirt, fence, sorbent, etc. Selection criteria for offshore and near shore uses Boom failure mechanisms and solutions: entrainment, drainage, splash over, boom submergence, and planing Response time Safety warnings for spills of gasoline or other low flash point products Site specific considerations: wetland damage at low tide, mooring to existing structures, location of nearby amenities or sensitive areas 	Select boom upon based upon consideration of location, oil type, and environmental factors
Deploy boom	<ul style="list-style-type: none"> Deployment equipment and safety requirements Selecting boom for response: dependence upon sea state and application Typical deployment configurations for containment and deflection Determination of boom angle Vessel selection Preparation and inspection Towing: tow line length, attachment to the tow post Mooring: anchor size and number, length of mooring line, mooring arrangement Safety checklist for operations 	Deploy and moor booms to safely and effectively concentrate oil for recovery to protect resources and to deflect slicks
Retrieve boom	<ul style="list-style-type: none"> Recover, clean, disassemble, and store equipment 	<ul style="list-style-type: none"> Safely recover booms without damaging Clean and store boom
Select appropriate skimmer	<ul style="list-style-type: none"> Skimming principles and types: weir, oleophilic, suction, other 	Select appropriate skimmer for intended application

TABLE FRP 8.3: POSITION TITLE: Recovery/Protection Unit Leader and Team Member

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Operate skimmers	<ul style="list-style-type: none"> Basic engine types, fuel needs, controls, lube and hydraulic systems, fittings and connections Operational difficulties: breakdown, debris Safety considerations 	<ul style="list-style-type: none"> Start, operate, and shutdown skimmer Monitor for optimum performance and evaluate need to change skimmer type Trouble shoot minor problems
Equipment maintenance	<ul style="list-style-type: none"> Cleaning, disassembly, and storage Check and repair equipment 	Remove oil and debris, repair broken or worn parts, and store skimmer in "ready to use" condition
Select sorbents	<ul style="list-style-type: none"> Characteristics Sorbent types and effectiveness 	Select effective sorbents
Use sorbents	<ul style="list-style-type: none"> Application of effective sorbent to spill conditions 	Apply, recover, reuse, dispose of sorbents effectively
Identify appropriate conditions for conducting bioremediation	<ul style="list-style-type: none"> Principle of process, agents, and application methods Limitations and advantages 	Determine applicability of bioremediation to oil cleanup
Assist in selection of appropriate shoreline cleanup techniques	<ul style="list-style-type: none"> Methods and required equipment: natural, mechanical, manual, flushing Cleanup alternatives vs. environmental sensitivities Habitat disturbance from cleanup operations Changing conditions: seasonal, diurnal, tidal Practical considerations: access, disposal 	<ul style="list-style-type: none"> Assess factors dictating shoreline response Assist in selection of appropriate cleanup methods
Clean up shoreline	<ul style="list-style-type: none"> Safety considerations: tides, equipment, animals, physical hazards Careful and efficient execution of response 	
Categorize and quantify collected oily wastes	<ul style="list-style-type: none"> Oily liquids and solids generated during clean-up 	Determine factors affecting operation of transfer equipment
Select pumps, conveyors, and other oily waste transfer equipment	<ul style="list-style-type: none"> Transfer options and mechanical principles: pumps: centrifugal, loge, gear, intermeshing screw, vane, flexible impeller, screw, auger, progressing cavity, piston, diaphragm other: air conveyor, vacuum truck, portable vacuum unit Capabilities of transfer equipment: oil viscosity, pour point, debris, abrasive, portability, emulsification, cold weather operations, ease of repair and handling Lightering operations 	Determine suitable means to transfer materials
Safely operate waste oil transfer equipment	<ul style="list-style-type: none"> Preparation, operation, and disconnection of equipment Use of controls Safety considerations 	<ul style="list-style-type: none"> Safely operate pumps, conveyors, and other equipment Troubleshoot minor problems
Store and dispose of oily waste materials generated by cleanup	<ul style="list-style-type: none"> Land and water based storage options: pit, prefabricated kit, towable tank, drums, trucks (tank, vacuum, dump, pickup), barges (tank, deck, hopper), vessels (workboat, skimmer, supply boat, tanker), plastic bags and tubing, and spent boom Factors for selection of storage sites (environmental and regulatory) 	<ul style="list-style-type: none"> Assist in the selection of storage sites and options Set up and use storage facilities
Segregate and minimize waste	<ul style="list-style-type: none"> Segregation of materials Waste reduction practices: reuse, oil/water separation, minimal collection of non-oiled material, minimal formation of waste water 	<ul style="list-style-type: none"> Sort materials to facilitate storage and disposal Separate and recycle waste materials

TABLE FRP 8.3: POSITION TITLE: Recovery/Protection Unit Leader and Team Member		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Facilitate disposal of collected materials	<ul style="list-style-type: none"> Disposal options: reprocessing, recycling, landfilling, stabilization, burning, incineration, bioremediation, landfarming Capabilities of equipment and techniques Selection of disposal options: environmental, regulatory, access, security On site disposal for remote locations Safety, fire control equipment 	<ul style="list-style-type: none"> Assist in the selection of disposal sites and options Operate on site disposal methods Provide feedstock for disposal units
Restore equipment to prespill conditions	<ul style="list-style-type: none"> Cleaning requirements and methods Waste water collection Equipment maintenance and storage 	Perform equipment restoration activities
Participate in debriefing	<ul style="list-style-type: none"> Technical problems and solutions 	Suggest improved response methods

TABLE FRP 8.4: POSITION TITLE: Emergency Operations Unit Leader and Team Member		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Hazard recognition	<ul style="list-style-type: none"> Basic physical chemistry of petroleum and petroleum products Basic toxicology of oil Material safety data sheets Fire and explosion hazards 	Identify properties and hazards associated with the spilled oil or product
Identify and stop discharge at the source	<ul style="list-style-type: none"> Causes of spills Options to stop oil/product flow 	Assist in selection control measures
Identify response priorities and select counter measures	<ul style="list-style-type: none"> Description of cleanup phases and hardware alternatives Response steps: stopping, monitoring, confinement, deflection, removal, storage, disposal Planning and logistics: timing, resource utilization, safety, incident command structure Protection priorities Spill control options Deployment requirements 	<ul style="list-style-type: none"> Prioritize sensitivity, identify protection zones Review merits and disadvantages of spill control alternatives Assist in determining best response methodology
Implement safety procedures	<ul style="list-style-type: none"> Safety checklist for response operations Safe work practices: cleanup equipment, petroleum products, site Personal protective clothing and equipment Capability of personnel; length of shift, level of training 	<ul style="list-style-type: none"> Recognize need for and properly use personnel protective clothing and equipment Prevent unsafe worker performance
Take appropriate site security measures	<ul style="list-style-type: none"> Implement site security and access restrictions 	<ul style="list-style-type: none"> Use safety equipment Ensure security of work site
Use of communications equipment	<ul style="list-style-type: none"> Response information and communications needs Portable UHF/VHF radios and cellular telephones Radio operations protocols and use 	Communicate effectively to facilitate response
Participate in debriefing	<ul style="list-style-type: none"> Technical problems and solutions 	Suggest improved response methods

**TABLE FRP 8.5: POSITION TITLE: Air Operations Unit Leader and Team Member
(Operations Section 45 SPTG/CC)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Assist in initial assessment of spill and potential impacts	<ul style="list-style-type: none"> Type and volume of spill sources General description of causes of spills Spill volume determination Oil types Proximity to shoreline Potential impacts on resources Effects on flora and fauna Persistence of an oil type on shoreline Public response pressures 	<ul style="list-style-type: none"> Recognize oil types and behavior Determine slick trajectory Predict fate and consequences
Hazard recognition	<ul style="list-style-type: none"> Basic physical chemistry of petroleum and petroleum products Basic toxicology of oil Material safety data sheets Fire and explosion hazards 	Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	<ul style="list-style-type: none"> Influence of sea and weather conditions on oil properties and slick behavior Boating safety Implications of sea state and wind speed on response operations 	<ul style="list-style-type: none"> Recognize limitations of response equipment Use data to predict speed and direction of slick transport, fate, and behavior
Forecast slick transport and spreading	<ul style="list-style-type: none"> Effect of oil properties, sea state and weather on spread rate and transport Spill volume as a function of slick area, thickness, and appearance Trajectory modeling Implications to countermeasures operations 	Estimate spill volume and direction of movement
Identify the effect of weathering on response operations, hazards, and impacts	<ul style="list-style-type: none"> Weathering processes: evaporations, dissolution, emulsification, biodegradation, sedimentation Effect of weather, sea state, and oil type on weathering Fire hazards Implications to countermeasures operations 	Assess effect of environmental conditions on oil and product
Implement safety procedures	<ul style="list-style-type: none"> Safety checklist for response operations Safe work practices: cleanup equipment, petroleum products, site Personal protective clothing and equipment Capability of personnel; length of shift, level of training 	<ul style="list-style-type: none"> Recognize need for and properly use personnel protective clothing and equipment Prevent unsafe worker performance
Use of communications equipment	<ul style="list-style-type: none"> Response information and communications needs Portable UHF/VHF radios and cellular telephones Radio operations protocols and use 	Communicate effectively to facilitate response
Participate in debriefing	<ul style="list-style-type: none"> Technical problems and solutions 	Suggest improved response methods

**TABLE FRP 8.6: POSITION TITLE: Wildlife Unit Leader and Team Member
(Planning Branch 45 CES/CEV)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Resource Protection	<ul style="list-style-type: none"> • Deploy deflection and/or containment boom • Deploy sorbent materials • Construct dikes and/or dams • Report on the effectiveness of booming/diking arrangements • Identify protection resource needs, such as: <ul style="list-style-type: none"> - boom types - boom lengths - mooring systems - anchor buoy and lights - vessel support equipment 	<ul style="list-style-type: none"> • Boom deployment • On shore recovery and containment techniques
Assist in initial assessment of spill and potential impacts	<ul style="list-style-type: none"> • Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures 	<ul style="list-style-type: none"> • Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Hazard recognition	<ul style="list-style-type: none"> • Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards 	Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	<ul style="list-style-type: none"> • Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations 	<ul style="list-style-type: none"> • Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Identify response priorities and select counter measures	<ul style="list-style-type: none"> • Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements 	<ul style="list-style-type: none"> • Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Response cleanup requirements on an ongoing basis	<ul style="list-style-type: none"> • Operational efficiency of equipment and alternative resources • Changing oil properties and environmental factors • New information 	Apply changing data to the selection of cleanup equipment and to the choice of response effect locations to optimize operations
Implement safety procedures	<ul style="list-style-type: none"> • Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training 	<ul style="list-style-type: none"> • Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response

TABLE FRP 8.6: POSITION TITLE: Wildlife Unit Leader and Team Member		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Identify appropriate conditions for conducting bioremediation	<ul style="list-style-type: none"> • Principle of process, agents, and application methods • Limitations and advantages 	Determine applicability of bioremediation to oil cleanup
Assist in selection of appropriate shoreline cleanup techniques	<ul style="list-style-type: none"> • Methods and required equipment: natural, mechanical, manual, flushing • Cleanup alternatives vs. environmental sensitivities • Habitat disturbance from cleanup operations • Changing conditions: seasonal, diurnal, tidal • Practical considerations: access, disposal 	<ul style="list-style-type: none"> • Assess factors dictating shoreline response • Assist in selection of appropriate cleanup methods
Participate in debriefing	<ul style="list-style-type: none"> • Technical problems and solutions 	Suggest improved response methods

TABLE FRP 8.7: POSITION TITLE: Site Management Unit Leader and Team Member (Operations Section 45 SPTG/CC)		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Hazard recognition	<ul style="list-style-type: none"> • Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards 	Identify properties and hazards associated with the spilled oil or product
Implement safety procedures	<ul style="list-style-type: none"> • Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, site • Personal protective clothing and equipment • Capability of personnel; length of shift, level of training 	<ul style="list-style-type: none"> • Recognize need for and properly use personnel protective clothing and equipment • Prevent unsafe worker performance
Take appropriate site security measures	<ul style="list-style-type: none"> • Implement site security and access restrictions 	<ul style="list-style-type: none"> • Use safety equipment • Ensure security of work site
Assess transportation needs	<ul style="list-style-type: none"> • Ongoing transportation needs of ALL cleanup phases 	Determine transportation requirements
Choose appropriate response vessels	<ul style="list-style-type: none"> • Capabilities of available small boats • Safe deployment and operation of boats • Navigation of small boats • Effects of environmental factors on vessel operations 	<ul style="list-style-type: none"> • Select appropriate means of transportation • Operate vessels safely and effectively
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response
Store and dispose of oily waste materials generated by cleanup	<ul style="list-style-type: none"> • Land and water based storage options: pit, prefabricated kit, towable tank, drums, trucks (tank, vacuum, dump, pickup), barges (tank, deck, hopper), vessels (workboat, skimmer, supply boat, tanker), plastic bags and tubing, and spent boom • Factors for selection of storage sites (environmental and regulatory) 	<ul style="list-style-type: none"> • Assist in the selection of storage sites and options • Set up and use storage facilities
Segregate and minimize waste	<ul style="list-style-type: none"> • Segregation of materials • Waste reduction practices: reuse, oil/water separation, minimal collection of non-oiled material, minimal formation of waste water 	<ul style="list-style-type: none"> • Sort materials to facilitate storage and disposal • Separate and recycle waste materials

TABLE FRP 8.7: POSITION TITLE: Site Management Unit Leader and Team Member
(Operations Section 45 SPTG/CC and Planning Section 45 CES/CEV)

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Facilitate disposal of collected materials	<ul style="list-style-type: none"> Disposal options: reprocessing, recycling, landfilling, stabilization, burning, incineration, bioremediation, landfarming Capabilities of equipment and techniques Selection of disposal options: environmental, regulatory, access, security On site disposal for remote locations Safety, fire control equipment 	<ul style="list-style-type: none"> Assist in the selection of disposal sites and options Operate on site disposal methods Provide feedstock for disposal units
Restore equipment to prespill conditions	<ul style="list-style-type: none"> Cleaning requirements and methods Waste water collection Equipment maintenance and storage 	Perform equipment restoration activities
Participate in debriefing	<ul style="list-style-type: none"> Technical problems and solutions 	Suggest improved response methods

TABLE FRP 8.8: POSITION TITLE: Planning Section Chief

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Prepare response action plan	<ul style="list-style-type: none"> Elements of a viable response plan <ul style="list-style-type: none"> - time available - resources available - containment plan - protection/deflection plan - oil recovery plan - temporary storage plan - disposal plan - dispersant application plan - site safety plan - Equipment deployment plan - personnel protect equipment - plan adjustment mechanisms 	Prepare and brief plan
Conduct briefings	<ul style="list-style-type: none"> Briefing techniques 	<ul style="list-style-type: none"> Conduct briefings for: <ul style="list-style-type: none"> - senior officers - subordinates - community - media
Spill trajectory forecasting	<ul style="list-style-type: none"> Influence of sea and weather conditions on oil properties and slick behavior/spread rate Estimating spill size Trajectory modeling 	Use data to predict speed and direction of oil movement
Personnel management	<ul style="list-style-type: none"> Team leadership Time management Stress management Delegations methods 	<ul style="list-style-type: none"> Identify/define/assign tasks & expectations Monitor results
Make recommendations for improved preparedness	<ul style="list-style-type: none"> Familiarity with existing contingency plan 	<ul style="list-style-type: none"> Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan Demonstrate analytical skills

**TABLE 8.9: POSITION TITLE: Strategy & Tactics Planning Unit Leader and Team Members
(Operations, Planning and Logistics Section)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Assist in preparation of response action plan	<ul style="list-style-type: none"> • Elements of a tactical response plan <ul style="list-style-type: none"> - time available - resources available - containment plan - protection/deflection plan - oil recovery plan - temporary storage plan - disposal plan - dispersant application plan - Equipment deployment plan - plan adjustment mechanisms 	Assist in Preparation of plans
Spill trajectory forecasting	<ul style="list-style-type: none"> • Influence of sea and weather conditions on oil properties and slick behavior/spread rate • Estimating spill size • Trajectory modeling 	Use data to predict speed and direction of oil movement
Make recommendations for improved preparedness	<ul style="list-style-type: none"> • Familiarity with existing contingency plan 	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

**TABLE FRP 8.10: POSITION TITLE: Health & Safety Planning Unit Leader and Team Member
(45 SW/SE)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Prepare health & safety plan	<ul style="list-style-type: none"> • Elements of a plan • resources available • spilled oil/product hazard evaluation • physical site hazards • personnel protect equipment 	Prepare and brief plan
Implement safety procedures	<ul style="list-style-type: none"> • Safety checklist for response operations • Safe work practices: cleanup equipment, petroleum products, sites • Personal protective clothing and equipment • Capability of personnel: length of shift, level of training, physical exposures 	<ul style="list-style-type: none"> • Recognize need for and properly select personal protective clothing and equipment • Prevent unsafe worker performance
Ensure provision of first aid and access to medical facilities	<ul style="list-style-type: none"> • Safety risks of petroleum identified • Effects of exposure from: inhalation, dermal contact, ingestion • Safety risks and handling guidelines for equipment • Safe boating practices and guidelines • first aid • MSDS 	<ul style="list-style-type: none"> • Facilitate care of injured personnel • Prevent self injury
Conduct safety briefings	<ul style="list-style-type: none"> • Briefing techniques 	<ul style="list-style-type: none"> • Conduct briefings for: <ul style="list-style-type: none"> - senior officers - subordinates - community - media
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response
Make recommendations for improved preparedness	Familiarity with existing contingency plan	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

**TABLE 8.11: POSITION TITLE: Natural Resources Planning Unit Leader and Team Member
(45 CES/CEV)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Assist in preparation of response action plan	<ul style="list-style-type: none"> • Elements of a response plan <ul style="list-style-type: none"> - time available - resources available - containment plan - protection/deflection plan - oil recovery plan - temporary storage plan - disposal plan - dispersant application plan - equipment deployment plan - plan adjustment mechanisms 	Assist in Preparation of plans
Resource Protection	<ul style="list-style-type: none"> • Deploy deflection and/or containment boom • Deploy sorbent materials • Construct dikes and/or dams • Report on the effectiveness of booming/diking arrangements • Identify protection resource needs, such as: <ul style="list-style-type: none"> - boom types - boom lengths - mooring systems - anchor buoy and lights - vessel support equipment 	<ul style="list-style-type: none"> • Boom deployment • On shore recovery and containment techniques
Assist in initial assessment of spill and potential impacts	<ul style="list-style-type: none"> • Type and volume of spill sources • General description of causes of spills • Spill volume determination • Oil types • Proximity to shoreline • Potential impacts on resources • Effects on flora and fauna • Persistence of an oil type on shoreline • Public response pressures 	<ul style="list-style-type: none"> • Recognize oil types and behavior • Determine slick trajectory • Predict fate and consequences
Hazard recognition	<ul style="list-style-type: none"> • Basic physical chemistry of petroleum and petroleum products • Basic toxicology of oil • Material safety data sheets • Fire and explosion hazards 	Identify properties and hazards associated with the spilled oil or product
Assess sea and weather conditions	<ul style="list-style-type: none"> • Influence of sea and weather conditions on oil properties and slick behavior • Boating safety • Implications of sea state and wind speed on response operations 	<ul style="list-style-type: none"> • Recognize limitations of response equipment • Use data to predict speed and direction of slick transport, fate, and behavior
Identify response priorities and select counter measures	<ul style="list-style-type: none"> • Description of cleanup phases and hardware alternatives • Response steps: stopping, monitoring, confinement, deflection, removal, storage, disposal • Planning and logistics: timing, resource utilization, safety, incident command structure • Protection priorities • Spill control options • Deployment requirements 	<ul style="list-style-type: none"> • Prioritize sensitivity, identify protection zones • Review merits and disadvantages of spill control alternatives • Assist in determining best response methodology
Response cleanup requirements on an ongoing basis	<ul style="list-style-type: none"> • Operational efficiency of equipment and alternative resources • Changing oil properties and environmental factors • New information 	Apply changing data to the selection of cleanup equipment and to the choice of response effect locations to optimize operations
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF tides and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response

TABLE 8.11: POSITION TITLE: Natural Resources Planning Unit Leader and Team Member

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Identify appropriate conditions for conducting bioremediation	<ul style="list-style-type: none"> • Principle of process, agents, and application methods • Limitations and advantages 	Determine applicability of bioremediation to oil cleanup
Assist in selection of appropriate shoreline cleanup techniques	<ul style="list-style-type: none"> • Methods and required equipment: natural, mechanical, manual, flushing • Cleanup alternatives vs. environmental sensitivities • Habitat disturbance from cleanup operations • Changing conditions: seasonal, diurnal, tidal • Practical considerations: access, disposal 	<ul style="list-style-type: none"> • Assess factors dictating shoreline response • Assist in selection of appropriate cleanup methods
Participate in debriefing	<ul style="list-style-type: none"> • Technical problems and solutions 	Suggest improved response methods

TABLE FRP 8.12: POSITION TITLE: Demobilization Planning Unit Leader and Team Member (45 SW/LG)

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Prepare demobilization action plan	<ul style="list-style-type: none"> • Elements of a viable response plan <ul style="list-style-type: none"> - timing of completion of work unit - resources on scene - plan adjustment mechanisms 	Prepare and brief plan
Conduct briefings	<ul style="list-style-type: none"> • Briefing techniques 	<ul style="list-style-type: none"> • Conduct briefings for: <ul style="list-style-type: none"> - senior officers - subordinates - community - media
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF radios and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response
Make recommendations for improved preparedness	<ul style="list-style-type: none"> • Familiarity with existing contingency plan 	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

**TABLE FRP 8.13: POSITION TITLE: Finance Section Chief
(45 CONS)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Maintain contracting records	<ul style="list-style-type: none"> Contract agreements Market rates Purchase order system Basic Ordering Agreements Change order agreements Accounting procedures 	<ul style="list-style-type: none"> Establish log keeping procedures for: <ul style="list-style-type: none"> contractors subcontractors leased equipment consumable personnel
Establish claims office	<ul style="list-style-type: none"> Claims procedures Regulatory requirements 	<ul style="list-style-type: none"> Organize claims office Delegate claims responsibility
Coordinate subcontracted services	<ul style="list-style-type: none"> Contracting procedures Basic ordering agreements Market rates Daily work sheets 	<ul style="list-style-type: none"> Assess need for subcontracted services Execute contracts Define role of subcontractors in overall response organization Monitor work
Conduct briefings	Briefing techniques	<ul style="list-style-type: none"> Conduct briefings for: <ul style="list-style-type: none"> senior officers subordinates community media
Verify/certify costs	<ul style="list-style-type: none"> Reasons for cost documentation Liability, cost recovery Daily log procedures Equipment cost report Manpower forms Invoices for contract services Personnel activity sheets Daily worksheets Travel claims Accident claims 	<ul style="list-style-type: none"> Present a plan for filing and record maintenance consolidate records and produce reports of expenditures by category
Provide final cost documentation report	<ul style="list-style-type: none"> Cost document procedures Report writing techniques Coding structure 	<ul style="list-style-type: none"> Construct a simple coding structure for the response Produce final cost report
Personnel management	<ul style="list-style-type: none"> Team leadership Time management Stress management Delegations methods 	<ul style="list-style-type: none"> Identify/define/assign tasks & expectations Monitor results

**TABLE FRP 8.14: POSITION TITLE: Contract Branch Leader and Team Member
(45 CONS)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Maintain contracting records	<ul style="list-style-type: none"> Contract agreements Market rates Purchase order system Basic Ordering Agreements Change order agreements Accounting procedures 	<ul style="list-style-type: none"> Establish log keeping procedures for: <ul style="list-style-type: none"> contractors subcontractors leased equipment consumable personnel
Coordinate subcontracted services	<ul style="list-style-type: none"> Contracting procedures Basic ordering agreements Market rates Daily work sheets 	<ul style="list-style-type: none"> Assess need for subcontracted services Execute contracts Define role of subcontractors in overall response organization Monitor work

**TABLE FRP 8.15: POSITION TITLE: Cost Branch Leader and Team Member
(45 CONS)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Verify/certify costs	<ul style="list-style-type: none"> • Reasons for cost documentation • Liability, cost recovery • Daily log procedures • Equipment cost report • Manpower forms • Invoices for contract services • Personnel activity sheets • Daily worksheets • Travel claims • Accident claims 	<ul style="list-style-type: none"> • Present a plan for filing and record maintenance • Consolidate records and produce reports of expenditures by category
Provide final cost documentation report	<ul style="list-style-type: none"> • Cost document procedures • Report writing techniques • Coding structure 	<ul style="list-style-type: none"> • Construct a simple coding structure for the response • Produce final cost report
Participate in debriefing	<ul style="list-style-type: none"> • Technical problems and solutions 	Suggest improved response methods

**TABLE FRP 8.16: POSITION TITLE: Claims Branch Leader and Team Member
(45 CONS)**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Establish claims office	<ul style="list-style-type: none"> • Claims procedures • Regulatory requirements 	<ul style="list-style-type: none"> • Organize claims office • Delegate claims responsibility
Verify/certify costs	<ul style="list-style-type: none"> • Reasons for cost documentation • Liability, cost recovery • Daily log procedures • Equipment cost report • Manpower forms • Invoices for contract services • Personnel activity sheets • Daily worksheets • Travel claims • Accident claims 	<ul style="list-style-type: none"> • Present a plan for filing and record maintenance • Consolidate records and produce reports of expenditures by category
Provide final cost documentation report	<ul style="list-style-type: none"> • Cost document procedures • Report writing techniques • Coding structure 	<ul style="list-style-type: none"> • Construct a simple coding structure for the response • Produce final cost report
Participate in debriefing	<ul style="list-style-type: none"> • Technical problems and solutions 	Suggest improved response methods

TABLE FRP 8.17: POSITION TITLE: Logistics Section Chief

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Identify resources	<ul style="list-style-type: none"> • Location of additional resources • Means to obtain resources • Regional agreements • Basis ordering agreements • Negotiations • Contracting procedures 	Locate and acquire additional resources
Shut down field operations	<ul style="list-style-type: none"> • Updated inventory and location of equipment and personnel • Procedures to terminate operations 	Describe how the operations should be terminated in an orderly manner
Make recommendations for improved preparedness	<ul style="list-style-type: none"> • Familiarity with existing contingency plan 	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills
Personnel management	<ul style="list-style-type: none"> • Team leadership • Time management • Stress management • Delegations methods 	<ul style="list-style-type: none"> • Identify/define/assign tasks & expectations • Monitor results

**TABLE FRP 8.18: POSITION TITLE: Support Unit Leader and Team Member
(45 SPTG/CC)(**

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Identify resources	<ul style="list-style-type: none"> • Location of additional resources • Means to obtain resources • Regional agreements • Basis ordering agreements • Negotiations • Contracting procedures 	Locate and acquire additional resources
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF tildes and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response
Assess transport needs	<ul style="list-style-type: none"> • Ongoing transportation needs for ALL cleanup phases 	Determine transportation requirements
Make recommendations for improved preparedness	<ul style="list-style-type: none"> • Familiarity with existing contingency plan 	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE FRP 8.19: POSITION TITLE: Personnel Unit Leader and Team Member

TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Identify personnel resources	<ul style="list-style-type: none"> • Location of additional personnel resources • Means to obtain personnel resources • Negotiations • Contracting procedures 	Locate and acquire additional personnel resources
Document assignment of personnel	<ul style="list-style-type: none"> • Personnel assignment and status reports 	Develop and utilize a personnel locator system and track the assignment and location of personnel
Use of communications equipment	<ul style="list-style-type: none"> • Response information and communications needs • Portable UHF/VHF tildes and cellular telephones • Radio operations protocols and use 	Communicate effectively to facilitate response
Assess transport needs	<ul style="list-style-type: none"> • Ongoing transportation needs for personnel cleanup phases 	Determine transportation requirements
Make recommendations for improved preparedness	<ul style="list-style-type: none"> • Familiarity with existing contingency plan 	<ul style="list-style-type: none"> • Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan • Demonstrate analytical skills

TABLE FRP 8.20: POSITION TITLE: Service Unit Leader and Team Member (45 SPTG/CC and 45 SW/LG)		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Provide for emergency and routine medical services	<ul style="list-style-type: none"> Identify medical resources and logistics support needs Report medical unit needs 	Manage/coordinate medical resources
Provide food and berthing services	<ul style="list-style-type: none"> Catering service agreements Establishing kitchens, galleys, canteens Drinking water sources Motel/hotel contracts Identify berthing quarters, barracks vessels, camping gear, personal hygiene equipment, and restroom facilities 	<ul style="list-style-type: none"> Develop living/berthing/messing facilities Report the status of berthing units
Use of communications equipment	<ul style="list-style-type: none"> Response information and communications needs Portable UHF/VHF tildes and cellular telephones Radio operations protocols and use 	Communicate effectively to facilitate response
Make recommendations for improved preparedness	<ul style="list-style-type: none"> Familiarity with existing contingency plan 	<ul style="list-style-type: none"> Demonstrate the ability to make pertinent recommendations for improvements to the contingency plan Demonstrate analytical skills

TABLE FRP 8.21: POSITION TITLE: Communications Unit Leader and Team Member		
TASK DESCRIPTION	HAVE KNOWLEDGE IN	SKILL
Develop communications network	<ul style="list-style-type: none"> Response information and communications needs Portable UHF/VHF tildes and cellular telephones Radio operations protocols and use 	Develop effective communications network to facilitate response
Participate in debriefing	<ul style="list-style-type: none"> Technical problems and solutions 	Suggest improved response methods

8.1 DRILLS AND EXERCISE PROCEDURES

The United States Coast Guard has developed the National Preparedness for Response Exercise Program (PREP) guidance document. The PREP is a unified federal effort and incorporates the exercise requirements of the USCG, EPA, RSPA, Office of Pipeline Safety (OPS) and the Minerals Management Service. Adoption of and participation in the PREP satisfies all OPA 90 mandated federal pollution response exercise requirements.

Every three years all components of the entire response plan must be exercised. The purpose of this requirement is to ensure that all components of the plan function adequately for response to an oil or hazardous substance spill rather than requiring each plan holder to conduct a major exercise every three years that tests all components at once. The PREP approach provides the same results without imposing an undue burden on the plan holder.

In the triennial cycle, the following internal exercises must be conducted:

- 12 - Qualified Individual notification drills
- 3 - Spill Management Team table top exercises, one of which must involve a worst case discharge scenario
- 3 - Unannounced Exercises (any of the exercises, with the exception of the QI Notification Drill, if conducted unannounced, will satisfy this requirement). One of the Unannounced Exercises must be an Equipment Deployment Exercise
- 6 - Facility-owned Equipment Deployment Exercises (for facilities with facility-owned equipment identified in their response plan).
- 3 - Oil Spill Response Organization (OSRO) Equipment Deployment Exercises

Exact dates cannot be scheduled as the OPA 90 requirements must be integrated with the overall drill and exercise program that the Disaster Preparedness group at CCAS is constantly changing to meet the overall requirements of the 45 Space Wing and the CCAS. Drills will be designed to test the fifteen core components of a response plan: Following is a sample of the schedule that will be used to plan the triennial cycle:

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1999			QIN		FEX (U)	QIN	OSRO (U)		QIN	TTE	FEX	QIN
2000	QIN	TTE	FEX	QIN			QIN	FEX	OSRO	QIN		
2001	FEX (U)	QIN	OSRO		QIN	TTE (U)	FEX	QIN			QIN	

QIN - Qualified Individual Notification Drill

TTE - Management Team Table Top Exercise

FEX - Facility Owned Equipment Deployment Exercise

OSRO - Oil Spill Response Organization Equipment Deployment Exercise

(U) - Indicates an unannounced drill

Drills will be designed to test and exercise the core components of the response plan as shown in Table FRP-8.22.

TABLE FRP 8.22: CORE TEST COMPONENTS OF THE RESPONSE PLAN		
ORGANIZATIONAL DESIGN	OPERATIONAL RESPONSE	RESPONSE SUPPORT
Notifications	Discharge Control	Communications
Staff Mobilization	Assessment of Discharge	Transportation
Ability to operate within the response management system described in the plan	Containment of Discharge	Personnel Support
	Recovery of Spilled Material	Equipment Maintenance and Support
	Protection of Economically, Politically, Socially, and Environmentally Sensitive Areas	Procurement
	Disposal of Recovered Products	Documentation

8.2 TRAINING LOGS/DRILL AND EXERCISE LOGS

A record must be maintained for each internal drill, exercise and area exercise. The following types of information will be included in the Drill and Exercise Log:

TABLE FRP 8.23: FACILITY AND REGIONAL QUALIFIED INDIVIDUAL NOTIFICATION DRILLS	
APPLICABILITY:	Facility
FREQUENCY:	Quarterly or routine communication if it occurs on at least a quarterly basis.
INITIATING AUTHORITY:	FIC
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL:	(Insert the name of the person responsible for conducting this drill here)
PARTICIPATING ELEMENTS:	Facility response personnel, FIC, and RIC
SCOPE:	Exercise communication between the facility personnel and the Facility and Regional Qualified Individuals.
OBJECTIVES:	Contact must be made with the FIC and the RIC as designated in the response plan.
CERTIFICATION:	Self-Certification
VERIFICATION:	Verification to be accomplished by federal and state regulatory representatives during site visits.
RECORD RETENTION:	5 years
LOCATION:	Records must be kept at the facility
EVALUATION:	Self-Evaluation
CREDIT:	The plan holder may take credit for this exercise in the course of conducting routine business or other drills, provided that the objectives of the drill are met and the drill is properly recorded. Similarly, credit may be received for an actual spill response when these objectives are met and a proper record generated.

**TABLE FRP 8.24:
SPILL RESPONSE DRILL AND EXERCISE RECORD**

TOPIC		INFORMATION
DATE		
TYPE DRILL		
ANNOUNCED OR UNANNOUNCED		
FACILITY QUALIFIED INDIVIDUAL DRILL	CONTACT METHOD	
	TIME OF CONTACT	
	TIME OF CONFIRMATION	
REGIONAL QUALIFIED INDIVIDUAL DRILL	CONTACT METHOD	
	TIME OF CONTACT	
	TIME OF CONFIRMATION	
COMMENTS:		
SIGNATURE OF RESPONSIBLE OFFICIAL:		

TABLE FRP 8.25: SPILL MANAGEMENT TEAM TABLETOP EXERCISE	
APPLICABILITY:	Facility
FREQUENCY:	Annually
INITIATING AUTHORITY:	FIC
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL:	(Insert the name of the person responsible for conducting this drill here)
PARTICIPATING ELEMENTS:	Spill Management Team (Incident Response System Management Team - including at a minimum the FIC, Deputy FIC, Command Staff, and Section Chiefs)
SCOPE:	Exercise the Spill Management Team's organization, communication, and decision making skills in managing a spill response.
OBJECTIVES:	<p>At least one Spill Management Team Tabletop Exercise in a triennial cycle will involve simulation of a worst case discharge scenario.</p> <p>Exercise the Spill Management Team in a review of:</p> <ul style="list-style-type: none"> • Knowledge of the response plan • Proper notification • Communications system • Ability to access the Oil Spill Response Organizations (RIC and any BOA Contractors) • Coordination of organization/agency personnel with responsibility for spill response • Ability to effectively coordinate spill response activity with National Response System infrastructure • Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the Area, unique conditions of the Area, etc.
CERTIFICATION:	Self-Certification
VERIFICATION:	Verification to be accomplished by federal and state regulatory representatives during site visits.
RECORD RETENTION:	5 years
LOCATION:	Records must be kept at the facility
EVALUATION:	Self-Evaluation
CREDIT:	The plan holder may take credit for this exercise in the course of conducting routine business or other drills, provided that the objectives of the drill are met and the drill is properly recorded. Similarly, credit may be received for an actual spill response when these objectives are met and a proper record generated.

TABLE FRP 8.26: SPILL RESPONSE DRILL AND EXERCISE RECORD		
TOPIC		INFORMATION
DATE		
TYPE DRILL		
ANNOUNCED OR UNANNOUNCED		
TABLETOP EXERCISE	PERSONNEL INVOLVED	
	BASIC SCENARIO	
	PROBLEMS NOTED	
	PROPOSED SOLUTIONS	
COMMENTS:		
SIGNATURE OF RESPONSIBLE OFFICIAL:		

TABLE FRP 8.27: SPILL RESPONSE EQUIPMENT DEPLOYMENT DRILLS	
APPLICABILITY:	Facility
FREQUENCY:	Semiannually
INITIATING AUTHORITY:	FIC
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL:	(Insert the name of the person responsible for conducting this drill here)
PARTICIPATING ELEMENTS:	Facility response personnel responsible for logistics and equipment deployment
SCOPE:	<p>Deploy and operate facility-owned response equipment identified in the response plan. Only a representative sample of each type of equipment or that equipment that is necessary to respond to an average most probable discharge whichever is less, need be deployed. (At least 1000' of each type of boom in the inventory [only 50' of Bottom Seal boom] and one of each type of skimming system must be deployed to receive credit for this drill)</p> <p>The remainder of the equipment which is not deployed must be included in a comprehensive training and maintenance program. Credit will be given for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.</p>
OBJECTIVES:	<p>Demonstrate ability of facility personnel to deploy and operate equipment.</p> <p>Ensure response equipment is in proper working order. Dysfunctional response equipment is to be repaired or replaced within 30 days.</p>
CERTIFICATION:	Self-Certification
VERIFICATION:	Verification to be accomplished by federal and state regulatory representatives during site visits.
RECORD RETENTION:	5 years
LOCATION:	Records must be kept at the facility
EVALUATION:	Self-Evaluation
CREDIT:	The plan holder may take credit for this exercise in the course of conducting routine business or other drills, provided that the objectives of the drill are met and the drill is properly recorded. Similarly, credit may be received for an actual spill response when these objectives are met and a proper record generated.

NOTE: If a facility with facility-owned equipment also identifies Oil Spill Response Organization (OSRO) equipment in their response plan, the OSRO equipment must also be deployed and operated in accordance with the equipment deployment requirements for OSRO owned equipment. An OSRO that responds to and has equipment pre-staged in various geographic areas is required to conduct Equipment Deployment Drills in each area on an annual basis.

TABLE FRP 8.28: SPILL RESPONSE DRILL AND EXERCISE RECORD		
TOPIC		INFORMATION
DATE		
TYPE DRILL		
ANNOUNCED OR UNANNOUNCED		
EQUIPMENT DEPLOYMENT EXERCISE	ON-SITE OR CONTRACTOR	
	EQUIPMENT ACTUALLY DEPLOYED	
		RESPONSE TIME
	PROBLEMS NOTED	
	PROPOSED SOLUTIONS	
COMMENTS:		
SIGNATURE OF RESPONSIBLE OFFICIAL:		

TABLE 8.29: UNANNOUNCED DRILLS	
APPLICABILITY:	Response Plan Holders (Facility and Regional) within a COTP Area
FREQUENCY:	Annually NOTE: Plan holders are not required to participate in a federal government initiated unannounced drill if they have participated in an unannounced federal or state oil spill response drill within the previous 36 months.
INITIATING AUTHORITY:	FIC, RIC, U.S. Coast Guard, U.S. Environmental Protection Agency, and/or Office of Pipeline Safety
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL:	(Insert the name of the persons responsible (FIC and RIC) for conducting this drill here)
PARTICIPATING ELEMENTS:	Response Plan Holders
SCOPE:	<p>Self-initiated:</p> <ul style="list-style-type: none"> • May be any required drill except Notification Drill • Must conduct proper notifications for the scenario • Must involve equipment once every 3 years <p>USCG/EPA/OPS-initiated</p> <ul style="list-style-type: none"> • A maximum of 4/COTP Zone/EPA Region per year • Will be limited to a maximum of four hours duration. • Will involve response to an average most probable discharge scenario. • Will require proper notifications for the scenario. • Will involve equipment deployment to respond to the spill scenario. • Will not be required for a pipeline by the USCG or EPA since this will be covered by OPS.
OBJECTIVE:	<p>Conduct proper notifications to respond to the unannounced scenario of an average most probable discharge and demonstrate that equipment deployment is:</p> <ul style="list-style-type: none"> • Timely • Conducted with adequate amount of equipment for scenario • Properly deployed
CERTIFICATION:	Initiating Agency (including FIC and RIC)
VERIFICATION:	Initiating Agency (including FIC and RIC)
	5 years
LOCATION:	Records must be kept at the facility
EVALUATION:	Evaluation to be conducted by initiating agency (including FIC and RIC).
CREDIT:	The plan holder may take credit for this exercise in the course of conducting an actual spill response, provided that the objectives of the drill are met and the event is properly recorded.

The initiating agency will provide a record for this drill.

8.3 DISCHARGE PREVENTION MEETING LOGS

This section contains the record of discharge prevention meetings.

TABLE FRP 8.30: DISCHARGE PREVENTION MEETING RECORD		
DATE: <input style="width: 150px;" type="text"/>		
ATTENDEES:		
<div style="display: flex; justify-content: space-between;"><div style="width: 40%; text-align: center;">TOPIC</div><div style="width: 60%; text-align: center;">DESCRIPTION</div></div>		
SUBJECTS DISCUSSED	1.	
	2.	
	3.	
	4.	
ACTIONS/ REQUIREMENTS	1.	
	2.	
	3.	
	4.	
COMMENTS: <div style="height: 40px; border: 1px solid black; margin-top: 5px;"></div>		
SIGNATURE OF RESPONSIBLE OFFICIAL: <div style="height: 30px; border: 1px solid black; margin-top: 5px;"></div>		

9.0 SECURITY

To protect the security of the Cape Canaveral Air Station (CCAS), a detailed description of facility security arrangements cannot be published in a public document. The perimeter of CCAS is surrounded by appropriate fencing or natural barriers with manned entrances at all times. The base is also constantly patrolled.

The general "Security" information provided below has been extracted from the "Cape Canaveral Air Station & Florida Annexes, FACILITY USER'S GUIDE," January 1995, pages 4-9.

The Security Police implement Air Force policies, regulations, and procedures in the accomplishment of its assigned taskings. Security requirements are based on the protection of designated Space Launch Systems and related facilities, priority resources, and national security information against acts of espionage, sabotage, and direct physical attack.

Policy

Badges – Entrance onto CCAS is permitted only to persons who have been properly badged. Badges are issued at the Pass and Identification Section (PIDS) at the south entrance. Badges are issued to individuals authorized by the designated company officials. When entering main gates, the badge will be held face out to the officer. While on the installation, badges will be worn face out, above the waist, at all times. Badges will not be worn outside CCAS.

Employee Termination – When an employee is terminated, his/her supervisor shall recover the individual's badge, issue the employee an exit pass or escort him/her to the gate, and surrender the badge to PIDS at the first opportunity.

Photography – Photography inside restricted/controlled areas is prohibited without permission of the applicable SLS (Space Launch Squadron) Commander. Official photography is provided by the 45 SW Photographic and Optical Services Contractor. Persons observed taking photographs without authorization will have their film confiscated. It will not be returned to the owner but will become property of the U.S. Government.

Alcohol and Weapons – Alcoholic beverages are prohibited on CCAS unless authorized by a 45 SW Group Commander. Firearms, ammunition, fireworks, knives of more than 3 ½ inches, air guns, and dangerous weapons of any kind are not permitted on CCAS and will be impounded if detected during a vehicle check/search or personell search.

Cargo Clearances - All vehicles are subject to spot checks at gates and elsewhere on CCAS, with probable cause. Cargo clearances must be used when transporting tools or equipment off CCAS.

Vehicle Escorts- Security Police escorts (and in some cases high voltage escorts) are required for large vehicles or loads, and for any vehicle over 14-feet wide, 13-feet 6 inches high, or 85-feet long. Do not pass any vehicle that is being escorted except when directed. All vehicle operators must be aware of overhead power and communications lines.

Traffic - The maximum road speed on CCAS is 50 mph or as posted. Motorists must yield to all emergency vehicles and escorts, observe all posted speed limits and other pertinent signs, and watch for wildlife. Deer are more active during the winter months and can cause serious accidents and heavy damage to vehicles. All motor vehicle accidents or incidents occurring on CCAS must be immediately reported to J-BOSC Security Police at 853-2121.

Test Support Activities - Routine activities may possibly be interrupted from time to time due to launch support operations or test support activities. Some roads on CCAS may be closed or blocked which would prevent going to normal work sites. All personnel must observe all roadblocks and traffic control devices.

How Services Are Obtained - Daily Security Police or assistance may be obtained by calling Security Police Headquarters at 853-2121. Personnel who observe a crime, or even suspect a crime, may call CRIME STOP at 853-4444. Service is provided 24 hours a day, 7 days a week.

Security Police support services are offered on a request-only basis (escorts, convoys, etc.) and may be obtained by calling Cape Support at 853-5211. (This type of support service may require additional funding.)

10.0 COMMUNICATIONS

In the event of an oil spill, hazardous substance spill, or disaster of any kind, the extensive telecommunications systems that are currently in place at the CCAS facilities will be utilized. In the case of the initial response activities for a small spill, the telecommunications capability of the response contractor will be used. If a sustained spill response is required, the additional organization and telecommunication systems that will be needed to support a response will be mobilized to direct and coordinate cleanup personnel within any areas affected. Details of the larger response are described in Air Force Manual 32-4004, "Emergency Response Operations" dated 1 January 1995.

COMMUNICATIONS RESOURCES

TABLE FRP 10.1: ON-SITE INVENTORY: COMMUNICATIONS						
TYPE	ASSIGNED TO	CALL SIGN OR PHONE NUMBER	PRIMARY NETWORK OR FREQUENCY	BRAND AND MODEL (year, if available)	CHARGER OR STORAGE LOCATION	OP STATUS
HANDHELD RADIOS	Chief 2	Chief 2	13, 16	Motorola Saber	Station 1	
	Division 1	Division 1	13,16	Motorola Saber	Station 1	
	Battalion 1	Battalion 1	13, 16	Motorola Saber	Station 1	
	Training	Training	13, 16	Motorola Saber	Training	
CAR/TRUCK RADIOS	Chief 2	Chief 2	Multiple	Motorola Saber	Station 1	
	Division 1	Division 1	Multiple	Motorola Saber	Station 1	
	Battalion 1	Battalion 1	Multiple	Motorola Saber	Station 1	
BASE STATION RADIOS	Com Center	Fire Control	Multiple	Motorola Saber	Facility 49750	
CELLULAR PHONES	Chief 2	749-4867	na	Motorola	Chief 2 Vehicle	
	Division 1	749-6384	na	Motorola	Division 1 Vehicle	
OTHER:						
POINT OF CONTACT: Division 1		DAY PHONE: 853-9253		24-HOUR PHONE: 853-9253		
COMMENTS:						
WARNING: ONLY "INTRINSICALLY SAFE" HANDHELD RADIOS AND RECHARGEABLE BATTERY PACKS SHOULD BE USED AT OIL SPILLS. A radio is "intrinsically safe" only if BOTH the radio and battery pack are "intrinsically safe."						
This inventory table functions both as an On-Site Inventory and as part of the Communications Plan. "Intrinsically safe" Motorola handheld radios and battery packs are marked with a green dot on the back, at the junction of the radio body and its battery pack; if BOTH dots are not present, the radio is not "intrinsically safe."						

Last updated: January 1999

10.1 TELECOMMUNICATIONS: SPILL RESPONSE

Initially, response telecommunications will be carried out by response personnel on normal telecommunication channels. If spill response activities reaches a point where communication mechanisms are inadequate, the Communications Unit Leader will be responsible for establishing an expanded ICS Telecommunications System to support the ICS response organization.

The Response Team will establish an operations center. The Communications Unit Leader and staff, located at the operations center will report to the Logistics Section Chief, operate the Dispatch Center, and carry out preassigned duties. The staff could be made up of Navy and spill response contractor employees trained and certified to fill the assigned positions and carry out preassigned duties.

As part of the establishment of the expanded ICS telecommunications system, the Communications Unit Leader will be responsible for developing plans for the effective use of incident telecommunications equipment, supervision of the incident telecommunications center, distribution of telecommunications equipment, and maintenance of the equipment. The Communications Unit Leader will coordinate the use of all communication facilities, activities, and radio frequency usage through the use of a regularly published Incident Radio Telecommunications Plan (see Table FRP 10.1).

Activity Emergency Operations Center (AEOC)

The Incident Commander will be responsible for activating the AEOC. The AEOC will be supported by radio, telephone, data, and fax communications systems in support of cleanup efforts. The Communications Unit Leader will keep the Incident Commander updated as to communications capabilities and limitations.

10.2 ORGANIZATION

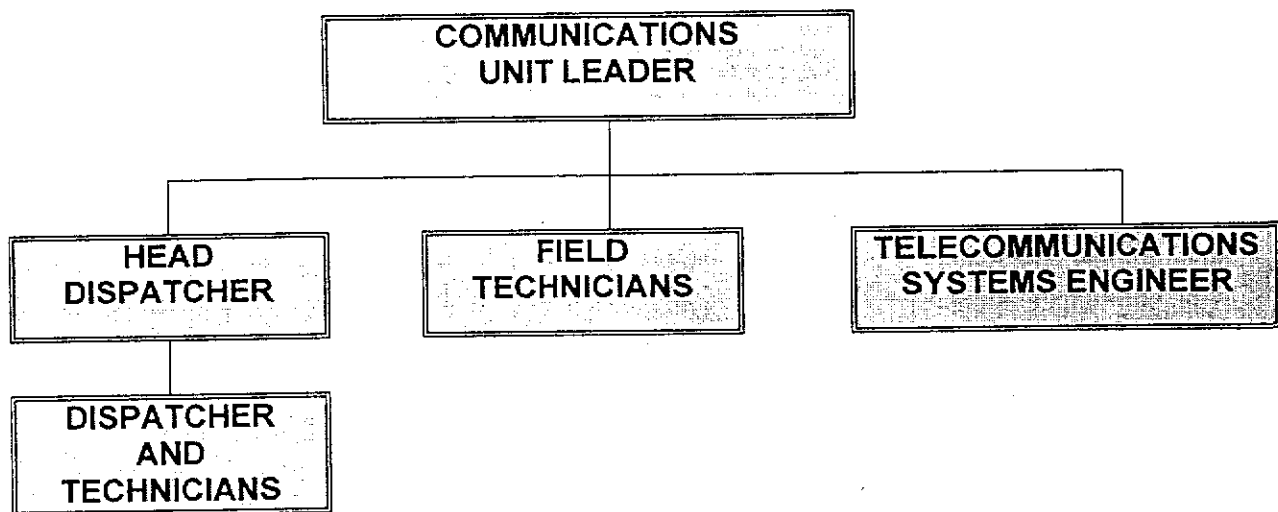
Response telecommunications will be organized and managed under the Incident Command System. The telecommunications unit is supervised by the Communications Unit Leader who reports to the Logistics Section Chief. The size and nature of the staff reporting to the Communications Unit Leader will depend on the extent of the response required. A typical telecommunications organizations for a moderate spill incident is shown in Figure FRP 10.1.

Duties

The **Communications Unit Leader** will set up and operate the needed telecommunications systems, order supplemental communications equipment, verify that extended telecommunications equipment has been installed for optimum coverage, activate telephone systems and data networks, and develop the Incident Radio Communications Plans for each operational period.

Under the direction of the Communications Unit Leader, the **Head Dispatcher** will supervise the telecommunications center, set shift hours, verify that dispatchers have needed materials, and prepare daily unit logs for documentation.

FIGURE FRP 10.1
Communications Organizations



NOTE: One individual may fill more than one of these positions.

Spill Response Dispatchers receive and transmit radio and telephone message traffic in support of incident personnel and agencies external to the incident, provide dispatch services and maintain 24-hour radio logs for documentation. The message center dispatcher receives, records, and routes information concerning critical oil spill tactical activities. Runners may distribute hard copy materials to ICS staff members. There will typically be an operations and a logistics dispatcher on duty. Radio operators in the field will communicate information from specific sites or operations directly to the AEOC via the dispatch center.

The telecommunications **Technical Supervisor** oversees the installation of all communication systems required by the Communications Unit leader. Telecommunication technicians will verify that incident telecommunication radio and telephone systems are operable (install repeaters, antennas, receivers, etc.), maintain an inventory of telecommunication equipment, distribute and recover equipment and resources, and service communications equipment.

The telecommunications **System Engineer** is responsible for planning the technical aspects of the field support telecommunication systems. This engineer also serves as the alternate communications unit leader.

TABLE FRP 10.2 INCIDENT RADIO COMMUNICATIONS PLAN				
Incident Name	Date Prepared	Time Prepared	Operational Period (Date/Time)	
Basic Radio Channel Utilization				
Assignment				
Channel				
Function				
Frequency				
System/Cache				
Remarks				

Training and Certification

Persons assigned to telecommunication roles within the ICS response organization will be given ICS training with the objective of certifying them for their preassigned telecommunications duties. Telecommunication positions within the ICS structure will usually be filled by personnel with professional technical communications experience. This core staff will be supplemented by contractor personnel as needed.

Incident Radio Telecommunications Plan

Communications during a spill response will be managed through the use of a common telecommunications plan. Before each daily briefing, the Communications Unit Leader will prepare this plan, which will be reviewed and distributed to ICS unit leaders.

Under ICS, the Communications Unit Leader assigns telecommunications according to function and to situational demands. They are typically broken into four main nets and as many subgroups as needed for expansion. Radio nets for moderate incidents will normally be organized as indicated below.

Command Net

The command net is the highest priority net and almost always employs duplex VHF frequencies. This net will link together the incident commander, key staff members, section chiefs, and division and group supervisors. This net is monitored by the AEOC tactical dispatcher and is the designated incident emergency frequency.

Tactical Nets

There may be several tactical nets based on the size and nature of the spill. They may be established around agencies, departments, geographical areas, or specific functions as determined by the Communications Unit Leader and identified operational needs.

Logistical Net

The logistical net will be used for the ordering and transporting of resources and the efficient control of all support functions. It is monitored by the AEOC. It can be either duplex or simplex, VHF or UHF, depending on terrain and usage.

All logistics communications will be conducted on dedicated logistics channels to prevent impacting operations. Logistics traffic will be routed through the logistics dispatcher in the AEOC for accountability and tracking. Early in the incident, support communication's nets will be established for logistics functions such as ground support, ordering, procurement, and supply. A general telecommunications net may be established for non-tactical communications between various elements of the ICS team.

Air Operations Net

Air Operations work under the control of the Operations Section Chief but have their own set of frequencies due to the nature of aircraft radios and the different environment. They are used for local traffic control, flight following, onsite air-to-air and air-to-ground telecommunications. This net may be monitored by the AEOC.

Air operations are used for surveillance, tactical operations, and logistics. Communications are required for flight following and air traffic control, and for transmittal of spill-related information.

Aerial surveillance is one of the key tools used to track spill location and to plan response activities. Surveillance operations will be done primarily by helicopter but may also utilize fixed wing aircraft. Communications between the surveillance aircraft and AEOC and ground crews will be by VHF radio usually on VHF Marine frequencies. Communications between aircraft and response vehicles and vessels will be by VHF radio.

Flight following position reports would be relayed every 15 minutes to Air Traffic Control for the full duration of all flights. This will be accomplished on aircraft radio dedicated to emergency spill operations.

If operations require a **tactical flight**, such as an ADDSPAC mission, normal flight-following rules are to be followed. If warranted, a Tactical Air Coordinator will control on-scene aircraft during response operations via predesignated air-to-air frequencies. All tactical aircraft will be made aware of operational frequencies before they enter the restricted air space that may exist around a spill site.

The aircraft in the area will contact the air operations controller on the aviation contact frequency and then announce its location, altitude and intentions to other aircraft on the air-to-air frequency.

Logistical flights for air transport of personnel and equipment will be made in accordance with flight following rules. Pilots will make themselves aware of current operating air-to-air and air-to-ground frequencies before entering restricted air space over the spill.

All logistical flights will be scheduled through the Air Branch Director located at the AEOC. Before any logistical flight, the pilots will be briefed as to the nature of the mission, coordinates, current traffic control, flight following, air-to-air, and air-to-ground frequencies. Upon arriving in the area the pilot will announce his location, altitude and intentions on the on-scene air-to-air aircraft frequency and monitor this frequency for other air traffic. Upon arriving at his destination, the pilot will call the local controller on the established frequency. When departing the area, the pilot will announce his intentions for flight following and continue to monitor air-to-air frequency for local traffic.

Air Traffic Control (on-scene air traffic safety) will be maintained over a common traffic advisory frequency (CTAF). Pilots shall give periodic positions reports, monitor the appropriately designated frequency for advisories and establish visual contact with and separation from other traffic. All flights shall be conducted in accordance with any NOTAM published under FAR 91.100. Operations at airports with a tower will use frequencies assigned by the FAA to that tower.

Medical Emergency

In the event of a medical emergency, initial request and response will be initiated via telephone or radio. If an airborne medivac is needed, the aircraft will use standard aircraft frequencies.

Telecommunications: Systems and Equipment

This section describes oil spill response telecommunications equipment currently in place or in stock for emergency use.

Full time circuits between fixed points traversing public facilities may be leased Others may be established as required by dialing through the Public Switched Telephone Network (PSTN). Reliance upon switched telephone telecommunications to support information transfer needs during times of emergency is not a viable practice since there is no way to ensure that adequate circuits will be immediately available in the PSTN to support telecommunications

Radio Systems

Radio telecommunications are considered to be those communications involving transmissions between multiple mobile radio stations or between a radio base station and a mobile unit regardless of whether the base station is directly or remotely controlled by the dispatcher. Such facilities operate in the Maritime, Aviation, and Land Mobile Services as specifically licensed by the Federal Communications Commission.

Mobile radios are simplex standard series hand-held and base station VHF units with code cards or marine VHF hand-held units supported by a base station.

Supplementary Systems

The fixed-radio telecommunication facilities are adequate to meet the message traffic needs associated with day-to-day spill prevention. A sustained response, however, would require additional radio sites. The initial requirement would arise as a result of the need to support field activities of increasing magnitude while continuing to conduct daily routine operations. Additional radio channels will therefore have to be implemented to fulfill the communication needs for expanded response crews. The requirement for additional transmission sites, especially in the early stages of a response will arise not so much from the need to increase coverage area as from the frequency allocation structure, wherein many stations transmitting simultaneously at a single location will tend to create intolerable interchannel interference. This constraint requires that any system engineered to supplement the in-place telecommunications system be extremely flexible.

To provide optimum flexibility to adapt to evolving telecommunications requirements in the event of a spill and to furnish dedicated interagency telephone communications that cannot be impacted by switched network traffic patterns, long term communications support may be accomplished using equipment from the Navy's Supervisor Salvage that is specifically designed to support spill response operations.

10.3 TELECOMMUNICATIONS: LOGISTICS

Maintenance

Field maintenance of all telecommunications equipment is routinely performed by qualified personnel. Biannual checks and quick response spot checks are also performed.

Mobilization

In the event of an oil spill, pre-positioned contingency telecommunications equipment will be located and activated on order from the ICS Communications Unit Leader.

Telecommunications: Government Agencies

In the event of a spill, government agencies at various levels will be contacted, as dictated by the nature and extent of the spill. Phone numbers for these and other agencies are listed in the *Emergency Telephone List*.

If the magnitude of the incident makes it necessary for these agencies to station personnel onsite, communications links and equipment will be provided on an as-needed basis.

11.0 SITE-SPECIFIC HEALTH AND SAFETY PLAN

The safety and security of response and support personnel and others involved in an emergency response incident is the primary concern. The section on health and safety provides a general framework for the protection of oil spill response workers health and safety as well as complying with the requirements of state and federal laws.

The information contained in the health and safety section is intended to be used as a guide by the Safety Officer for preparing and implementing worker health and safety protection measures in order to maximize safety and allow critical oil spill response activities to proceed. Specific site control and emergency response procedures must be filled out at the beginning of any spill. Other procedures for activities such as confined space entry or hot work will require additional controls in order to fulfill the regulatory requirements. These and other health and safety and regulatory matters must be identified by the Safety Officer. Once identified, the Safety Officer will then need to take appropriate action to address those safety issues or regulatory requirements.

Medical Monitoring

All persons who will be exposed or will have the potential to be exposed to hazardous substances will take part in a medical monitoring program that meets the requirements of 29 CFR 1910.120(f). In general, medical monitoring will be conducted for workers as follows:

- Workers who have the potential to be exposed to hazardous substances at or above the Permissible Exposure Limits (PEL).
- Workers whose duties require them to wear a respirator for more than 30 days/year.
- Workers who are believed to have been exposed to hazardous substances or who exhibit symptoms of exposure.

Records and Reports

Both state and federal regulations require employers to prepare and maintain records of occupational injuries and illnesses.

11.1 HEALTH HAZARDS

Health hazards must be identified in the site specific health and safety plan. The following is a list of typical hazards that may be found at CCAS.

Primary Chemical Hazards

The following table lists typical petroleum products that are transported to and used at CCAS.

TABLE FRP 11.1 PERMISSIBLE EXPOSURE LIMITS OF PRODUCTS STORED OR USED ON CCAS		
Product	TWA (Time Weighted Average)	STEL (Short Term Exposure Limit)
JP-4 (jet fuel)	10 ppm	15 ppm
JP-5 (jet fuel)	10 ppm	15 ppm
JP-8 (jet fuel)	100 ppm	
DFO (diesel)	500 ppm	
MUM (unleaded gasoline)	300 ppm	500 ppm
ASA-3 (anti-static compound)	100 ppm	

The Material Safety Data Sheets (MSDSs) for all products used at CCAS must be on file in each work area for every hazardous chemical substance used, stored, or handled within that work area. Copies are to be kept in an MSDS Book located at a Hazardous Communication Work Station. A master copy will also be kept in the Safety and Mission Assurance Office. An archive file, of past MSDS's must also be maintained for a minimum of 30 years. This file is maintained in the Safety and Mission Assurance Office.

New substances that come in without an MSDS MUST NOT be introduced into the work area until an MSDS is obtained. OSHA requires a copy of the most current MSDS. On-line computer services are not updated frequently, and therefore MSDS copies obtained from them may not be current or valid. MSDS's MUST be secured from the Safety and Mission Assurance Office at 853-7882 (FAX 853-6060).

JP-5 (jet fuel)

JP-5 is a mixture of light hydrocarbons and naphthalene. Naphthalene is a potential irritant to eyes, skin and lungs and may cause changes to the blood, eyes, and kidney after prolonged or repeated exposure.

Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal.

JP-8 (jet fuel)

JP-8 is a mixture of hydrotreated light petroleum distillates, antioxidant, anti-static, corrosion inhibitor and metal deactivator. Health studies have shown that petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized.

Exposures to high concentrations may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

Diesel Fuel

Aspiration of liquid into the lungs may cause extensive pulmonary edema (dry land drowning). Prolonged or repeated skin contact will remove skin oils leading to irritation and/or dermatitis. High vapor concentrations are irritating to the eyes and lungs, and may cause headaches, dizziness, and unconsciousness.

Gasoline (unleaded)

Gasoline is a mixture of hydrocarbons, including aliphatic hydrocarbons, aromatic hydrocarbons, a variety of branched and unsaturated hydrocarbons, and additives. Extremely high levels of exposure could produce conditions such as dizziness, coma, collapse, and death. Exposure to non-lethal doses is usually followed by complete recovery, although cases of permanent brain damage following massive exposure have been reported.

Secondary Chemical Hazard Identification

Oil and hazardous substance spill responses require the use of a wide variety of chemicals and materials which may singularly or in conjunction with the site work conditions create various hazards to site workers. Several of these hazards are identified in the following table.

TABLE FRP 11.2 SECONDARY CHEMICAL HAZARDS

HAZARD DESCRIPTION	RECOMMENDED PROTECTIVE EQUIPMENT	CONDITIONS UNDER WHICH EXPOSURE MAY OCCUR
Diesel and Gasoline Engine Exhaust Exposure to diesel or engine exhaust may promote inhalation of hydrocarbons, carbon monoxide and particulates. Exposure may irritate eyes and mucous membranes.	Monitor CO and O ₂ levels, ventilate area, and use half-mask respirator with organic and particulate filters.	Diesel and gasoline exhaust exposure may occur in poorly ventilated areas in the vicinity of diesel equipment. It may also occur in sheltered outdoor areas on calm days or during temperature inversion conditions.
Low Oxygen Levels Confined or restricted space atmospheres may be dangerous to life and health if O ₂ levels are below 19.5% (oxygen deficient) or greater than 25% (oxygen enriched)	Monitor O ₂ levels and ventilate area. Do not enter O ₂ deficient atmosphere without a confined space entry permit and supervision from the Safety Officer. Supplied air Personal Protective Equipment (PPE) is required. Safe O ₂ levels 19.5%-23%.	Poorly ventilated areas in the vicinity of oxygen consuming materials or equipment. This includes waste undergoing biological degradation or fuel powered equipment and confined or restricted spaces (e.g., tanks).
High Carbon Monoxide Levels Carbon monoxide is a colorless and odorless gas, slightly less dense than air and is toxic by inhalation. Carbon monoxide is also highly flammable (Lower Explosive Limit (LEL) = 12%; Upper Explosive Limit (UEL) = 75% by volume in air)	Monitor CO, and ventilate area. Use of supplied air PPE is required. Do Not enter high CO atmosphere without a confined space entry permit and supervision from Safety Officer. Safe CO levels are less than 50 ppm TWA.	Poorly ventilated areas in the vicinity of internal combustion engines. Acetylene welding, industrial heating equipment and processes involving incomplete combustion may also create this hazard.
Other Spill Response Specialty Agents Due to the varied nature of oil spill cleanup operations, numerous specialty chemicals in solid, liquid, and gaseous phases may be used or stored in work areas.	Obtain and review MSDSs for all products. Verify safety precautions and PPE needs. Obtain any required respirator, skin, eye, and splash protection.	Exposure to these materials in poorly ventilated areas or in open areas may occur if workers are unaware of the chemicals' toxic or physical properties.
Particulates Particulates may cause irritation to lungs, eyes, and mucous membranes. Particulates may also have toxic effects (e.g., lead, asbestos, cadmium, and silica).	Use half-mask respirator with particulate filter and appropriate cartridges. Use other PPE for eye and skin protection as needed.	Use of powdered or granular oil absorbent (vermiculite, diatomaceous earth, etc.) or other specialty products where particles become airborne and enter the breathing zone of personnel. Wind carried silts, and other dusts may also be a factor.
Biological Nutrients Inhalation of vapors, mists, and particulates or skin contact with nutrients used for biological treatment may result in irritation to lungs, eyes, and mucous membranes. Dermal absorption is also possible.	Obtain and review MSDS for the specific product. Verify safety precautions and PPE needs. Obtain required respirator, skin, eye, and splash protection.	Use of nutrients (fertilizers) in a spill cleanup effort may create potential exposures during spray application or other distribution and mixing process.
Dispersant Inhalation of vapors or mists or skin contact may result in irritation to lungs, eyes, and mucous membranes. Dermal absorption is also possible.	Obtain and review MSDS for specific product. Personnel involved in handling or applying dispersant will be provided specific training.	Application of dispersant during the initial spill event may expose workers to respiratory and dermal hazards.
Confined Spaces Inadequate ventilation coupled with limited egress creates potentially hazardous situations for workers. Oxygen deficient, toxic or flammable atmospheres may exist in these areas. All OSHA procedures regarding confined space entry will be followed.	Monitor CO, O ₂ , toxic, and flammable gas levels, and ventilate area. Do not enter a confined space without a confined space entry permit and supervision from the Safety Officer. Safe O ₂ levels = 19.5% to 25%; flammable gas limits = less than 10% LEL; toxic limits = less than ½ PEL or Threshold Limit Value (TLV) which ever is the lower value.	Confined spaces may be encountered on vessels, inside tanks, inside buildings, on drill rigs, in sumps, in ditches, etc. Product vapors or other emissions resulting from response operations may intensify this hazard.
Flammable Atmosphere A flammable gas, vapor, mist, or dust when mixed with air may create a flammable or explosive condition. Volatile vapors or gases will generally be of a sufficient quantity during the initial few hours of a spill to cause a flammable atmosphere.	Conduct flammable gas and oxygen monitoring prior to starting any work. Purge or inert atmospheres when possible. Obtain hot work permits prior to starting any cutting or welding. Safe flammable limits are less than 10% of the Lower Explosive Limit.	Flammable conditions may exist during the initial phase of a spill or at any time in areas where flammable dusts or vapors may concentrate. Holds of vessels and fueling areas are prime locations to find flammable atmospheres.

Subjecting response personnel to the hazards identified above can be avoided through the use of the proper personal protective equipment (PPE) and through proper monitoring and supervision by health and safety personnel. The following paragraphs briefly discuss proper procedures associated with some of the secondary hazards.

Hazardous Conditions

The hazards associated with the contaminants listed in Table FRP 11.2 are best controlled through early detection, use of PPE, implementation of engineering controls, or by avoiding the hazard. Early detection can be accomplished by using common sense and understanding the Health and Safety Plan.

Confined Space Entry

Entry into confined spaces (spaces with restricted egress and potentially hazardous atmospheres) will be conducted under the direct supervision of the Safety Officer and through the use of a confined space entry permit. Confined spaces may be oxygen deficient or have flammable or toxic atmospheres. Confined space entry will be permitted only if the parameters listed in the above table are within acceptable limits.

Physical Hazards

Physical hazards associated with oil spill cleanup operations are varied and the associated hazards depend upon the site-specific conditions, cleanup operations, and the type of equipment being used. Severe environmental and weather conditions, complex transportation and logistical requirements, long work hours, and intensive labor needs contribute to the high susceptibility of oil spill workers to physical hazards. The following table summarizes some of the physical hazards associated with spill cleanup operations.

TABLE FRP 11.3: GENERAL PHYSICAL HAZARDS

Hazard Description	Hazard Treatment Guidance	Hazard Abatement Technique
Slip, Trip, Fall Oil spill responders work in places where poor footing and lighting creates slip, trip, fall hazards.	Survey responders for possible unknown injuries. If injured, treat with first aid and seek medical attention.	Provide proper illumination in work areas. Keep work areas free of excess clutter. Move cautiously in work areas and use non-slip soles on footwear. Attempt to recognize and avoid or control hazards in the work area. Conduct hazard awareness briefings.
Back Injuries The requirement to mobilize and use great quantities of equipment during the oil spill response creates high probability of back injuries. Slips, trips, and falls contribute to back injuries.	Remove worker from the work area to prevent further stress on the worker's back. If necessary, stabilize the victim in a prone position with a backboard to prevent additional injury. Seek medical attention.	Lift objects correctly. Obtain assistance from co-workers. Use mechanical devices to reduce lifting effort. Do back and stretching exercises prior to lifting objects. Bend the legs when lifting instead of bending from the waist.
Eye Injuries An oil spill response may expose workers to numerous eye hazards, including those resulting from chemical exposure, equipment hazards, open flames, and impacts from particulates or other foreign bodies.	If chemicals have contacted a worker's eye, flush eye with water immediately. If particulate is in the eye, flush eye with water. If an object is imbedded in the eye, do not attempt to remove it. Cover the affected eye to prevent further irritation and seek medical assistance.	Use appropriate eye protection such as safety glasses, goggles, and face shields. Avoid exposure to vapors, mists, fumes, and dusts.
Handling of Hand Tools and Spill Response Equipment Tools used in cleanup operations such as shovels, picks, axes, etc. can inflict injury to adjacent workers if adequate distance is not maintained. Improper use of tools may also cause back injuries. Sorbents, containment booms, and waste materials can be heavy and awkward and handling and moving them may cause back injuries.	If injured, treat with first aid and seek medical assistance.	Team leaders must provide orientation for workers to familiarize them with the equipment that is being used. Use hand tools in a manner that will limit physical stress. Take frequent breaks to limit fatigue. Allow water to drain or remove ice from equipment prior to moving it. Use mechanical devices to handle heavy materials.
In Situ Burning In situ burning will present physical fire hazards as well as particulate hazards, visibility problems and heated gas hazards resulting from the combustion of oil and oily debris.	Determine weather conditions and select escape route from plume of burn area. Contact other vessels for assistance and exit burn area as rapidly as possible.	Adhere to burn safety plans, obtain frequent weather forecasts, stay upwind. Refer to tide and current predictions to assist in burn area avoidance.
Hypothermia Hypothermia is the lowering of the body temperature resulting from exposure to the elements. Hypothermia will induce death if not treated properly. Symptoms include shivering, loss of lucidity, loss of coordination, confusion, and cold skin temperature. Hypothermia will occur rapidly when immersed in cold water.	Prevent additional heat loss and warm victim by any means available. Remove any wet clothing, add heat by placing warm items next to the victim's body. Do not give alcoholic beverages to victim. Seek medical assistance.	Hypothermia can be avoided by dressing appropriately for weather conditions and regulating body temperature during work activities. Establishing a system to visually monitor workers for hypothermia warning signs will assist early detection. Avoid situation where clothes become wet such as from rain or ocean spray. Avoid excess heat loss through wind exposure.
Frostbite Frostbite may occur when workers are exposed to subfreezing weather conditions and improperly protected from the cold. Frostbite may affect exposed flesh or non-exposed body parts which transfer heat at rates sufficient to cause freezing.	Seek medical attention at once. Frostbit skin will appear white or light colored and may feel cold and solid. Thaw out body parts with warm water or by application of firm steady pressure with a warm body part. Do not thaw body parts unless they can be maintained at a warm temperature after thawing.	Carefully monitor weather conditions to allow time for work crews to prepare for forecasted cold weather. Workers should eat high energy foods, keep clothing dry, bring extra dry clothing, and test for extremity circulation on a regular basis.
Noise Injuries Sound sources that generate noise greater than 85 decibels include aircraft, outboard engines, generators, compressors, heaters, and heavy equipment. Noises that are greater than 85 decibels may cause permanent damage to hearing.	Monitor noise levels. Remove affected worker from duties that have high noise exposure potential. Provide worker with additional hearing protection equipment. Seek medical assistance as necessary.	Workers should use ear protection equipment or avoid high noise areas.

TABLE FRP 11.3: GENERAL PHYSICAL HAZARDS

Hazard Description	Hazard Treatment Guidance	Hazard Abatement Technique
Site Illumination Response operations during conditions of poor visibility or darkness may create dangerous or unhealthy conditions for response workers.	Provide substantial amounts of lighting and generator equipment. Personal head lamps and vehicle lighting may be used as supplemental lighting.	Provide adequate lighting. Use head lamps, portable lighting, and equipment lights to illuminate work sites.
Specialty or Heavy Equipment Mechanical equipment may have exposed moving parts, generate heat capable of causing burns, or generate high pressure liquids or gases which may injure workers. Movement of heavy equipment may cause injuries to personnel.	Perform first aid; seek medical attention immediately.	Read all operating guide manuals. Be aware of any moving parts which may cause injury. Avoid direct exposure to heat or pressure generated by equipment. Wear appropriate PPE to limit possible injury. Install backup alarms on heavy equipment. Ensure all guards are in place.
Vehicle, Aircraft, or Vessel Accidents Response efforts will in many cases require response personnel to travel by various modes of transportation. The emergency nature of the response may expose worker to marginally safe traveling conditions. The potential severity of Alaskan weather may exacerbate the consequences of a minor accident.	Be aware of you position at all times and know the locations of safe refuges along your intended travel route. Notify the Incident Command Post if an accident occurs and what assistance is required.	During all vehicle, aircraft, or vessel travel, workers will adhere to all established travel safety procedures. This includes fastening seat belts, maintaining communications, and wearing or having easy access to safety equipment such as Arctic clothing, life vest, and survival gear.
Heat Stress Heat stress may occur when a worker is exposed to elevated temperature conditions. Examples of when this may occur include worker suited in protective clothing which limits cooling of the individual and worker subjected to high ambient temperatures.	Move victim to cool, shaded location. Cool victim quickly by wrapping in wet towels. Treat victim for shock. Seek medical assistance immediately.	Heat stress may be avoided by taking frequent breaks to cool down and consuming large amounts of liquids. PPE can be fitted with cooling equipment. Ventilation may be used to assist with cooling. New site workers must acclimate themselves to the site conditions.
Worker Exhaustion Spill response activities often involve strenuous tasks and long work hours. Symptoms of exhaustion include loss of concentration, increased frequency of trips, falls, and slips, and worker complaints of cramping and pain. Work exhaustion often manifests itself in other hazards such as accidents and back injuries.	Supervisors must closely observe workers for signs of exhaustion. Once an exhausted worker is identified, he shall be assigned to a less stressful task or removed from labor duties entirely until recovered. Seek medical assistance as necessary.	Close observation by supervisors and use of the buddy system will be used to detect and prevent worker exhaustion. Frequent breaks along with consumption of high energy foods and liquids will also decrease the likelihood of exhaustion.
Wildlife Spill workers may encounter a wide variety of wildlife during response activities. Some of the wildlife may be capable of inflicting injuries to or killing response personnel. Bears present the primary wildlife hazard.	Treat injuries with standard first aid methods. Treat victim for shock. Seek medical assistance as necessary.	Wildlife protection procedures will be established for each specific spill event. These procedures may include the procurement of firearms or a "bear watch" for each group.
Weather Sudden changes in weather conditions may jeopardize the safety of responders. Ocean storm, high winds, dramatic temperature changes, or fog can all pose a serious threat.	If caught in severe weather, consider options carefully. Evacuation of work site may be necessary.	Obtain daily weather forecasts and updates as available. Preplan work site evacuation plans for worst case scenarios. Workers should bring extra clothing and emergency survival gear. Communications with the Incident Command Center must be maintained in order to coordinate evacuation or to receive support.
Electric Shock Electric equipment operated at greater than 12 volts, used inlet or conductive areas, or damaged equipment can produce a severe electrical shock.	Remove victim from contact with energized parts. Administer CPR and first aid as necessary. Obtain medical assistance.	Use intrinsically safe equipment or ground fault interrupter circuits to prevent shock.

11.2 INITIAL RESPONSE ACTIONS

Initial Site Assessment

The CCAS Site Assessment Form used by the CCAS Fire Department is attached and will be used by the Initial Incident Commander to determine the hazards at the spill site. This assessment must be made before any response effort can be undertaken.

Site Security

The Initial Incident Commander must evaluate the seriousness of the situation and determine the level of a health or safety risk to response personnel or the public in general and notify the Incident Commander as soon as possible. If the situation requires security, J-BOSC Protective Services officials should also be contacted for evacuations, establishing road blocks, and limiting access to response areas.

Surface Terrain and Meteorology

The direction and velocity of prevailing winds and the proximity of the spill to possible sources of ignition, (i.e. running equipment), must be immediately addressed. All potential ignition sources must be kept upwind of the spill or secured immediately. Some flammable vapors may be heavier than air and travel for long distances along the surface or settle in low lying areas.

Atmospheric Testing

A hazard evaluation procedure must be established and implemented by a trained individual in order to establish safe work practices, level of personal protective equipment, and other control procedures before any personnel are committed to spill response activities. At a minimum, the flammability of the vapors and the oxygen levels must be evaluated throughout the spill site. These levels should continue to be evaluated periodically throughout the work shift to detect changes in airborne hazards that may result from response activities or changing weather conditions.

12.0 PLAN REVIEW AND UPDATE

12.1 PLAN REVIEWS:

Facility response plans must be reviewed at least annually. The review shall incorporate any changes in the listing of economically important or environmentally sensitive areas identified in the ACP in affect 6 months prior to plan review.

- The review must occur within 1 month of the anniversary date of COTP approval of the plan.
- After the review, if changes are needed, a plan amendment must be submitted to the COTP for review or approval.
- If no changes are needed, the COTP must be notified in writing and a copy of the notification letter placed in the front of each copy of the facility plan and appropriately noted in the Record of Changes section in each plan copy.
- Any required changes must be entered in the plan and noted on the record of changes page. No deadline for plan amendment is given in the regulation, but since there is a requirement for an annual review, it is recommended that amendments be completed 3 months prior to submitting the plan for review.

12.2 PLAN AMENDMENTS

Revisions or plan amendments must be made and submitted to the COPT for review or approval whenever there is:

- A Change in the facility's configuration that significantly affects the information included in the response plan;
- A change in the type of oil group (persistent or nonpersistent) handled, stored, or transported that affects the required response resources;
- A change in the name and/or capabilities of the oil spill removal organization required by Section 154.1045 of the USCG regulation;
- A change in the facility's emergency response procedures;
- A change in the facility's geographic area of responsibility;
- Any other changes that significantly affect the implementation of the plan; or
- Five years from the date of COTP approval.

12.3 AMENDMENT SUBMITTAL

Amended plans should be distributed to all person, regulatory agencies, facilities, and Department of Defense Departments listed in the "Plan Distribution Sheet" in the front of this plan.

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left blank.

13.0 NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA)

Under all circumstances, NRDA's must be separated from the actual response. Personnel involved in an NRDA need to coordinate with the responders for logistical purposes, but the response role and the assessment role must remain two different procedures. Due to this constraint, NRDA are not appropriate for inclusion into the FRP. However, the Department of Defense has trustee responsibilities which must be fulfilled. For implementation, the most likely place for NRDA responsibilities to reside are in 45 CES/CEV office. Currently, the overall Air Force Policy on handling NRDA issues is still under development. Any additional information that is applicable to the scope of the FRP will be incorporated at a later date.

Under Executive Order No. 12777, the Department of Defense, is a trustee for natural resources present on DoD property. Therefore, the Department of Defense has direct responsibility to ensure that natural resources are appropriately protected, and if injured, that they are restored, rehabilitated or replaced to return the injured resources to baseline conditions. For further information on trustee responsibility, call 45 CES/CEV.

NOAA has been mandated by OPA 90 to write regulations for trustees to follow for assessing natural resource damages. These procedures are presently contained in a Proposed Rule (15 CFR 990). A trustee is not required to use the proposed procedures; however, if followed, the trustee(s) will obtain "rebuttable presumption" provided by section 1006(e)(2) of OPA 90, (i.e., the responsible party will have the burden of proof to disprove the trustees' claim in litigation). The intent of the proposed regulations are to provide a range of standardized and cost-effective procedures for assessing natural resource damages. These procedures will allow the trustees to expeditiously return natural resources and/or services to the public as compensation for injuries resulting from a discharge of oil. The proposed Rule calls for cooperative damage assessments to be conducted jointly between the different trustees and potential responsible parties. A cooperative damage assessment will expedite the process and avoid double counting, which is strictly prohibited under OPA 90.

Conceivably, the Air Force is in the position, as are other federal land-holding agencies, to be a trustee and/or a responsible party. It is in the Air Force's best interest to be adequately prepared for any scenario. As a trustee, the Air Force has a responsibility to protect natural resources under its trust, including the responsibility to return injured resources to their baseline conditions. As a potential responsible party, the Air Force has a vested interest in securing positive public and trustee relations by participating in a cooperative NRDA. Preplanning and coordination are the essential components of conducting an effective NRDA, in such that any resources injured are taken care of accordingly. By not being adequately prepared for an NRDA, the Air Force may be subject to bad publicity and/or lawsuits for the following reasons:

- Poor stewardship over natural resources
- Neglect of natural resource trustee responsibilities
- Lack of effort to take actions to uphold community relations
- Loss of Air Force credibility.

Air Force guidelines and policy are being developed to address NRDA requirements under OPA 90. Therefore, NRDA is not being addressed in the FRP. Since NRDA is an important requirement under OPA 90, the following paragraphs should be included in the FRP to serve as a reminder that NRDA will be an issue that will be occurring simultaneously with the oil spill response and cleanup efforts. Air Force involvement in the NRDA program will be required in some capacity. Although the FIC/RIC will need to be aware of NRDA, the subject and responsibilities will be addressed in a separate guidance document after Air Force guidelines and policy have been established. All applicable facility plans should contain the following explanation:

Due to the proximity of the Cape Canaveral Air Station to shoreline environments, abundant and fragile natural resources are potentially at stake. OPA 90 provides for the prevention of, and liability for removal and compensation for the discharge of oil into or upon navigable waters, adjoining shorelines, or the Exclusive Economic Zone. OPA 90 also provides for the designation of federal, state, tribal and foreign officials to act on behalf of the public as trustee(s) for natural resources. In the event that natural resources are injured, lost, destroyed, or the loss of use of natural resources occurs as a result of a discharge of oil covered by OPA 90, these officials are authorized to assess natural resource damages, present a claim for those damages, and develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent of the natural resources under their trusteeship.

Air Force guidelines and policy are being developed to address NRDA requirements under OPA 90. Until these guidelines and policy are established, FICs should review OPA 90, the NCP, and the NOAA proposed rule to become familiar with the general requirements of NRDA. Should a spill occur requiring an NRDA prior to development of the Air Force guidance document, the FIC should contact the following person for assistance:

The Air Force contact for NRDA information/questions is:

45 CES / CEV
1224 JUPITER STREET
PATRICK AIR FORCE BASE, FL 32925
(407) 494-7288

14.0 EPA CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION

The following is in accordance with 40 CFR 112, Attachment C-II

Appendix C to Part 112 - Substantial Harm Criteria

1.0 Introduction

The flowchart provided in Attachment C-I to this appendix shows the decision tree with the criteria to identify whether a facility "could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, or adjoining shorelines." In addition, the Regional Administrator has the discretion to identify facilities that must prepare and submit facility-specific response plans to EPA. [Note: Under the definitions, Port Canaveral does not qualify as a high volume port]

2.0 Description of Screening Criteria for the Substantial Harm Flowchart

A facility that has the potential to cause substantial harm to the environment in the event of a discharge must prepare and submit a facility-specific response plan to EPA in accordance with Appendix F to this part. A description of the screening criteria for the substantial harm flowchart is provided below:

2.1 Non-Transportation-Related Facilities With a Total Oil Storage Capacity Greater Than or Equal to 42,000 Gallons Where Operations Include Over-Water Transfer of Oil. A non-transportation-related facility with a total oil storage capacity greater than 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA. Daily oil transfer operations at these types of facilities occur between barges and vessels and onshore bulk storage tanks over open water. These facilities are located adjacent to navigable water.

2.2 Lack of Adequate Secondary Containment at Facilities With a Total Storage Capacity Greater Than or Equal to One Million Gallons. Any facility with a total storage capacity greater than or equal to one million gallons without secondary containment sufficiently large to contain the capacity of the largest tank within each storage tank area plus sufficient freeboard to allow for precipitation must submit a response plan to EPA. Secondary containment structures that meet the standard of good engineering practice for the purposes of this part, include berms, dikes, retaining walls, curbing, culverts, gutters, or other drainage systems.

- 2.3 Proximity to Fish and Wildlife and Sensitive Environments at Facilities With a Total Storage Capacity Greater Than or Equal to One Million Gallons. A facility with a total storage capacity greater than or equal to one million gallons must submit its response plan if it is located at a distance such that a discharge from the facility could cause injury (as defined in 40 CFR 112.2) to fish and wildlife and sensitive environments. For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan. Facility owners or operators must determine the distance at which an oil spill could cause injury to fish and wildlife and sensitive environments using the appropriate formula presented in Attachment C-III of this appendix or a comparable formula.
- 2.4 Proximity to Public Drinking Water Intakes at Facilities With a Total Storage Capacity Greater Than or Equal to One Million Gallons. A facility with a total storage capacity greater than or equal to one million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c). The distance at which an oil spill from an SPCC-regulated facility would shut down a public drinking water intake shall be calculated using the appropriate formula presented in Attachment C-III to this appendix or a comparable formula.
- 2.5 Facilities That Have Experienced Reportable Spills in an Amount Greater Than or Equal to 10,000 Gallons Within the Past Five Years and That Have a Total Storage Capacity Greater Than or Equal to One Million Gallons. A facility's oil spill history within the past five years shall be considered in the evaluation for substantial harm. Any facility with a total storage capacity greater than or equal to one million gallons that has experienced a reportable spill in an amount greater than or equal to 10,000 gallons within the past five years must submit a response plan to EPA.

3.0 Certification Form for Facilities That Do Not Pose Substantial Harm

If the facility does not meet the substantial harm criteria listed in Attachment C-I to this appendix, the owner or operator shall complete and maintain at the facility the certification form contained in Attachment-II to this appendix. In the event an alternative formula that is comparable to the one in this appendix is used to evaluate the substantial harm criteria, the owner or operator shall attach documentation to the certification form that demonstrates the reliability and analytical soundness of the comparable formula and shall notify the Regional Administrator in writing that an alternative formula was used.

Attachment C-II. -- Certification of Substantial Harm Determination Form

Facility name: Cape Canaveral Air Station
Facility address: Cape Canaveral, Florida 32920

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes XX No

2. Does the facility have a total oil storage capacity greater than or equal to one million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes No XX

3. Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula ⁽¹⁾) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of Fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.

Yes XX No

⁽¹⁾ If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

4. Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula ⁽¹⁾) such that a discharge from the facility would shut down a public drinking water intake ⁽²⁾?

Yes No XX

⁽²⁾ For the purposes of 40 CFR 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

5. Does the facility have a total oil storage capacity greater than or equal to one million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes No XX

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature _____

Name (please type or print) _____

Title _____

Date _____

Attachment C-III. -- Calculation of the Planning Distance

1.0 Introduction

1.1 The facility owner or operator must evaluate whether the facility is located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments or disrupt operations at a drinking water intake. To quantify that distance, EPA considered oil transport mechanisms over land and on still, tidal influence, and moving navigable waters. EPA has determined that the primary concern for calculation of a planning distance is the transport of oil in navigable waters during adverse weather conditions. Therefore, two formulas have been developed to determine distances for planning purposes from the point of discharge at the facility to the potential site of impact on moving and still waters, respectively. The formula for oil transport on moving navigable water is based on the velocity of the water body and the time interval for arrival of response resources. The still water formula accounts for the spread of discharged oil over the surface of the water. The method to determine oil transport on tidal influence areas is based on the type of oil spilled and the distance down current during ebb tide and up current during flood tide to the point of maximum tidal influence.

1.2 EPA's formulas were designed to be simple to use. However, facility owners or operators may calculate planning distances using more sophisticated formulas, which take into account broader scientific or engineering principles, or local conditions. Such comparable formulas may result in different planning distances than EPA's formulas. In the event an alternative formula that is comparable to the one contained in this appendix is used to evaluate

the criterion in 40 CFR 112.2(f)(ii)(B) or (f)(1)(ii)(C), the owner or operator shall attach documentation to the response plan cover sheet contained in Appendix F to this part that demonstrates the reliability and analytical soundness of the alternative formula and shall notify the Regional Administrator in writing that an alternative formula was used⁽³⁾.

(3) For persistent oils or non-persistent oils, a worst case trajectory model (i.e., an alternative formula) may be substituted for the distance formulas described in still, moving, and tidal waters, subject to Regional Administrator's review of the model. An example of an alternative formula that is comparable to the one contained in this appendix would be a worst case trajectory calculation based on credible adverse winds, currents, and/or river stages, over a range of seasons, weather conditions, and river stages. Based on historical information or a spill trajectory model, the Agency may require that additional fish and wildlife and sensitive environments or public drinking water intakes also be protected.

1.3 A regulated facility may meet the criteria for the potential to cause substantial harm to the environment without having to perform a planning distance calculation. For facilities that meet the substantial harm criteria because of inadequate secondary containment or oil spill history, as listed in the flowchart in Attachment C-1 to this appendix, calculation of the planning distance is unnecessary. For facilities that do not meet the substantial harm criteria for secondary containment or oil spill history as listed in the flowchart, calculation of a planning distance for proximity to fish and wildlife and sensitive environments and public drinking water intakes is required, unless it is clear without performing the calculation (e.g., the facility is located in a wetland) that these areas would be impacted.

1.4 A facility owner or operator who must perform a planning distance calculation on navigable water is only required to do so for the type of navigable water conditions (i.e., moving water, still water, or tidal-influenced water) applicable to the facility. If a facility owner or operator determines that more than one type of navigable water condition applies, then the facility owner or operator is required to perform a planning distance calculation for each navigable water type to determine the greatest single distance that oil may be transported. As a result, the final planning distance for oil transport on water shall be the greatest individual distance rather than a summation of each calculated planning distance.

1.5 The planning distance formula for transport on moving waterways contains three variables: the velocity of the navigable water (v), the response time interval (t), and a conversion factor (c). The velocity, v , is determined by using the Chezy-Manning equation, which, in this case, models the flood flow rate of water in open channels. The Chezy-Manning equation contains three

variables which must be determined by facility owners and operators. Manning's Roughness Coefficient (for flood flow rates), n , can be determined from Table 1 of this attachment. The hydraulic radius, r , can be estimated using the average mid-channel depth from charts provided by the sources listed in Table 2 of this attachment. The average slope of the river, s , can be determined using topographic maps that can be ordered from the U.S. Geological Survey, as listed in Table 2 of this attachment.

- 1.6 Table 3 of this attachment contains specified time intervals for arrival of response resources at the scene of a discharge. Assuming no prior planning, response resources should be able to arrive at the discharge site within 12 hours of the discovery of an oil discharge in Higher Volume Port Areas and within 24 hours in Great Lakes and all other river, canal, inland, and nearshore areas. The specified time intervals in Table 3 of Appendix C are to be used only to aid in the identification of whether a facility could cause substantial harm to the environment. Once it is determined that a plan must be developed for the facility, the owner or operator shall reference Appendix E to this part to determine appropriate resource levels and response times. The specified time intervals of this appendix include a 3-hour time period for deployment of boom and other response equipment. The Regional Administrator may identify additional areas as appropriate.

4.0 Oil Transport on Tidal-Influence Areas

- 4.1 The planning distance method for tidal influence navigable water is based on worst case discharges of persistent and non-persistent oils. Persistent oils are of primary concern because they can potentially cause harm over a greater distance. For persistent oils discharged into tidal waters, the planning distance is 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide.
- 4.2 For non-persistent oils discharged into tidal waters, the planning distance is 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.
- 4.3 Example of Determining the Planning Distance for Two Types of Navigable Water Conditions. Below is an example of how to determine the proper planning distance when a facility could impact two types of navigable water conditions: moving water and tidal water.
 - (1) Facility X stores persistent oil and is located downstream from locks along a slow moving river which is affected by tides. The river velocity, v , is determined to be 0.5 feet/second from the Chezy-Manning equation used to calculate oil transport on moving navigable waters. The specified time interval, t , obtained from Table 3 of this attachment

for river areas is 27 hours. Therefore, solving for the planning distance, d:

$$d = v \times t \times c$$

$$d = (0.5 \text{ ft/sec}) \times (27 \text{ hours}) \times (0.68 \text{ sec} \div \text{mile/hr} \div \text{ft})$$

$$d = 9.18 \text{ miles}$$

- (2) However, the planning distance for maximum tidal influence down current during ebb tide is 15 miles, which is greater than the calculated 9.18 miles. Therefore, 15 miles downstream is the appropriate planning distance for this facility.

Appendix D to Part 112 -- Determination of a Worst Case Discharge Planning Volume

1.0 Instructions

- 1.1 An owner or operator is required to complete this worksheet if the facility meets the criteria, as presented in Appendix C to this part, or it is determined by the RA that the facility could cause substantial harm to the environment. The calculation of a worst case discharge planning volume is used for emergency planning purposes, and is required in 40 CFR 112.20 for facility owners or operators who must prepare a response plan. When planning for the amount of resources and equipment necessary to respond to the worst case discharge planning volume, adverse weather conditions must be taken into consideration. An owners or operator is required to determine the facility's worst case discharge from either part A of this appendix for an onshore storage facility, or part B of this appendix for an onshore production facility. The worksheet considers the provision of adequate secondary containment at a facility.
- 1.2 For onshore storage facilities and production facilities, permanently manifolded tanks are defined as tanks that are designed, installed, and/or operated in such a manner that the multiple tanks function as one storage unit (i.e., multiple tank volumes are equalized). In a worst case discharge scenario, a single failure could cause the release of the contents of more than one tank. The owner or operator must provide evidence in the response plan that tanks with common piping or piping systems are not operated as one unit. If such evidence is provided and is acceptable to the RA, the worst case discharge volume would be based on the capacity of the largest tank within a common secondary containment area or the largest tank within a single secondary containment area, whichever is greater. For permanently manifolded tanks that function as one storage unit, the worst case discharge would be based on the combined storage capacity of all manifolded tanks or the capacity of the largest single tank within a secondary containment area, whichever is greater. For purposes of this rule, permanently manifolded tanks that are separated by internal divisions for each tank are considered to be single tanks and individual manifolded tank volumes are not combined.
- 1.3 For production facilities, the presence of exploratory wells, production wells, and storage tanks must be considered in the calculation. Part B of this appendix takes these additional factors into consideration and provides steps for their inclusion in the total worst case volume. Onshore oil production facilities may include all wells, flowlines, separation equipment, storage facilities, gathering lines, and auxiliary non-transportation-related equipment and facilities in a single geographical oil or gas field operated by a single operator. Although a potential worst case planning volume is calculated within each section of the worksheet, the final worst case amount depends on

the risk parameter that results in the greatest volume.

- 1.4 Marine transportation-related transfer facilities that contain fixed aboveground onshore structures used for bulk oil storage are jointly regulated by EPA and the U.S. Coast Guard (USCG), and are termed "complexes." Because the USCG also requires response plans from transportation-related facilities to address a worst case discharge of oil, a separate calculation for the worst case discharge volume for USCG-related facilities is included in the USCG IFR (see Appendix E to this part, section 10, for availability). All complexes that are jointly regulated by EPA and the USCG must compare both calculations for worst case discharge planning volume derived by using EPA and USCG methodologies and plan for whichever volume is greater.

Part A: Worst Case Discharge Planning Volume Calculation for Onshore Storage Facilities⁽¹⁾

(1) "Storage facilities" represent all facilities subject to this part, excluding oil production facilities.

Part A of this worksheet is to be completed by the owner or operator of an SPCC-regulated facility (excluding oil production facilities) if the facility meets the criteria as presented in Appendix C to this part, or it is determined by the RA that the facility could cause substantial harm to the environment. If you are the owner or operator of a production facility, please proceed to Part B of this worksheet.

A.2 Secondary Containment -- Multiple-Tank Facilities

Are all aboveground storage tanks or groups of aboveground storage tanks at the facility without adequate secondary containment?⁽²⁾ N (Y/N)

(2) Secondary containment is defined in 112.7(e)(2) of 40 CFR Part 112, revised as of July 1, 1992. Acceptable methods and structures for containment are given in 112.7(c)(1) of 40 CFR Part 112, revised as of July 1, 1992.

A.2.1 If the answer is yes, the final worst case discharge planning volume equals the total aboveground oil storage capacity at the facility.

(1) Final Worst Case Volume: GAL.

(2) Do not proceed further.

A.2.2 If the answer is no, calculate the total aboveground capacity of tanks without adequate secondary containment. If all aboveground storage tanks or groups of aboveground storage tanks at the facility have adequate secondary containment, ENTER "0" (zero).

0 GAL.

A.2.3 Calculate the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater, PLUS THE VOLUME FROM QUESTION A2(b).

FINAL WORST CASE VOLUME⁽³⁾

100000 GAL.

⁽³⁾ All complexes that are jointly regulated by EPA and the USCG must also calculate the worst case discharge planning volume for the transportation-related portions of the facility and plan for whichever volume is greater.

15.0 DEFINITIONS

Adverse Weather - The weather conditions that make it difficult for response equipment and personnel to cleanup or remove spilled oil.

These weather conditions will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice conditions, temperatures, weather-related visibility, and currents within the U.S. Coast Guard Captain of the Port zone in which the systems or equipment are intended to function.

The weather conditions considered by the operator in identifying the response systems and equipment to be deployed in accordance with a response plan, including wave height, ice, temperature, visibility, and currents within the inland or Coastal Response Zone (as defined in the National Contingency Plan [40 CFR 300]) in which those systems or equipment are intended to function.

Alteration - Any work on a tank or related equipment involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of a tank.

Branch - The organizational level having functional/geographic responsibility for major segments of the incident operations. The branch level is organizationally between the section and division/group.

Breakout Tank - A tank used to:

- (1) relieve surges in an oil pipeline system or
- (2) receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

Captain of the Port (COTP) Zone - A zone specified in 33 CFR part 3 and, where applicable, the seaward extension of that zone to the outer boundary of the Exclusive Economic Zone (EEZ).

Coastal Zone - All United States waters subject to the tide, United States waters of the Great Lakes and Lake Champlain, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the National Contingency Plan, and the land surface or land substrate ground waters, and ambient air proximal to those waters. (The term "coastal zone" delineates an area of federal responsibility for response action. Precise boundaries are determined

by agreement between the Environmental Protection Agency and the U.S. Coast Guard and are identified in Federal Regional Contingency Plans and Area Contingency Plans.)

Compensable values - The values that humans have for services provided by resources including, but not limited to, commercial, ecological, special significance, and passive uses.

Complex Facility - A facility possessing a combination of transportation-related and non-transportation-related components that are subject to their jurisdiction of more than one Federal agency under section 311(j) of the Clean Water Act.

Contracts or other approved means -

(1) A written contractual agreement with a response contractor that identifies and ensures the availability of the necessary personnel or equipment within appropriate response times;

(2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times;

(3) Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic areas; or

(4) Other specific arrangements approved by the EPA Regional Administrator upon request of the owner or operator.

Damages -

The amount of money calculated to compensate for injury to, destruction of, loss or use of natural resources, including the reasonable costs of assessing or determining the damage, which shall be recoverable by the United States, State, Indian tribe, or a foreign trustee.

Discharge -

Average Most Probable - [USCG] A discharge of the lesser of 50 barrels or 1 percent of the volume of the worst case discharge.

Maximum Most Probable - [USCG] A discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge.

Medium Spill - [EPA] Any spill volume greater than a small spill but equal to or less than 36,000 gallons or 10 percent of the capacity of the largest above ground storage tank, whichever is less.

Small Spill - [EPA] Any spill volume less than or equal to 2,100 gallons but not to exceed the calculated worst case discharge.

Worst Case - [EPA] For an onshore non-transportation-related facility, the largest foreseeable discharge in adverse weather conditions, based on the factors described in Appendix E to 40 CFR part 112.

[RSPA] The largest foreseeable discharge of oil, including a discharge from fire or explosion in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is determined as follows:

The pipeline's maximum release in time expressed in hours, plus the maximum shutdown response time in hours (based on historic discharge data or in the absence of such data, the operator's best estimate) multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or

The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventive action taken; or

If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system adjusted for the capacity or size of the secondary containment system, expressed in barrels.

[USCG] For and on shore facility and deepwater port, the largest foreseeable discharge in adverse weather conditions meeting the following requirements:

The loss of the entire capacity of all in-line and breakout tank(s) needed for the continuous operation of the pipelines used for the purposes of handling or transporting oil, in bulk to or from a vessel regardless of the presence of secondary containment; plus

The discharge from all piping carrying oil between the marine transfer manifold and the non-transportation-related portion of the facility. The discharge from each pipe is calculated as follows: The maximum time to discover the release from the pipe in hours, plus the maximum time to shut down flow from the pipe in hours (based on historic discharge data or the best estimate in the absence of historic discharge data for the facility) multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum relief valve setting or maximum system pressure when relief valves are not provided) plus the total line drainage volume expressed in barrels for the pipe between the marine manifold and the non-transportation-related portion of the facility; and

For a mobile facility, the loss of the entire contents of the container in which the oil is stored or transported.

Emergency Response Coordinator (ERC) - The EPA proposed OPA 90 regulations uses the term to indicate the person responsible for facility oil spill response coordination. In this plan the ERC and the Incident commander will be used interchangeably. (See Facility Incident Commander and Regional Incident Commander for definition)

Environmentally Sensitive Area - An area of environmental importance which is in or adjacent to navigable waters.

Exclusive Economic Zone - The zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Facility Incident Commander - The individual who is responsible for the management of incident operations up to the limits of the facility to respond. Under Navy policy the FIC and Facility Qualified Individual will be designated the same person.

Facility Qualified Individual - The English-speaking representative of the facility (base), located in the United States, available on a 24-hour basis, with full authority to: activate and contract with required oil spill removal organization(s); activate personnel and equipment maintained by the operator; act as liaison with the OSC; and obligate any funds required to carry out all required or directed oil spill activities. Under Navy policy, the FQI and FIC will be the same person.

Facility that could reasonably be expected to cause significant & substantial harm -

[EPA] Any facility that has the potential to cause substantial harm as determined by the EPA Regional Administrator considers the following additional factors are considered:

- Proximity to environmental areas of concern defined in 40 CFR 112, Appendix D;
- Frequency of past spills;
- Proximity to navigable waters;
- Age of oil storage tanks; and
- Other facility-specific and Region-specific impacts on public health

[RSPA] Any pipeline that is greater than 6 inches in outside nominal diameter, greater than 10 miles in length, and the line section:

- has experienced a release greater than 1,000 barrels within the previous five years,
- has experienced two or more reportable releases, as defined in 49 CFR 195.50, within the previous five years,
- Contains any electric resistance welded pipe, manufactured prior to 1970, operates at a maximum operating pressure established under 49 CFR 195.406 that corresponds to a stress level greater than 50 percent of the specified minimum yield strength of the pipe,
- Is located within a five mile radius of potentially affected public drinking water intakes and could reasonably be expected to reach public drinking water intakes, or
- Is located within a one mile radius of potentially affected environmentally sensitive areas, and could reasonably be expected to reach these areas.

[USCG] Any marine transportation-related facility (including piping and any structures that are used for the transfer of oil between a vessel and the facility) classified as a "significant and substantial harm" facility under 33 CFR 154.1015 (c) including a facility specifically designated

by the COTP under 33 CFR 154.1016(a).

Facility that could reasonably be expected to cause substantial harm -

[EPA] (1) A facility that transfers oil over water to or from vessels and has a total storage capacity greater than or equal to 42,000 gallons; or

(2) A facility with a total oil storage capacity greater than or equal to one million gallons and one of the following is true:

- The facility does not have secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground storage tank within each storage area;
- The facility is located at a distance (as calculated using the appropriate formula in 40 CFR 112 Attachment C-III or an alternative formula considered acceptable by the Regional Administrator such that a discharge from the facility could cause injury to an environmentally sensitive area as defined in 40 CFR 112 Appendix D;
- The facility is located at a distance as calculated using the appropriate formula in 40 CFR 112 Attachment C-III or an alternative formula considered acceptable by the Regional Administrator such that a discharge from the facility would shut down a public drinking water intake; or
- The facility has had a reportable spill in an amount greater than or equal to 10,000 gallons within the last five years.

[RSPA] Not defined.

[USCG] Any marine transportation-related facility classified as a "substantial harm" facility under 33 CFR 154.1015(b) including a facility specifically designated by the COTP under 33 CFR 154.1016(a).

Federal On-Scene Coordinator (FOSC) - The Federal Official designated by the Administrator of the EPA or by the Commandant of the USCG to coordinate and direct federal response under subpart D of the National Contingency Plan (40 CFR part 300). The DOD is designated as the FOSC for all DOD hazardous substance spill response.

Great Lakes - Lakes Superior, Michigan, Huron, Erie, and Ontario, their connecting and tributary waters, the Saint Lawrence River as far as Saint Regis, and adjacent port areas.

Group - A functional division (e.g., security, search and rescue)

High Volume Area - An area where an oil pipeline having a nominal outside diameter of 20 inches or more crosses a major river or other navigable water, which, because of the velocity of the river flow and vessel traffic on the river, would require a more rapid response in case of a worst case discharge or substantial threat of such a discharge. Appendix B to 49 CFR part 194 contains a list of some of the high volume areas in the United States.

Incident Action Plan - The plan, which is initially prepared at the first staff meeting after an oil spill occurs, that contains the general control objectives reflecting the overall strategy, and specific action plans for the next operational period. When complete, the incident action plan will have a number of attachments.

Incident Command System - A system for controlling personnel, facilities, equipment, and communications during emergency response. The system is designed to begin developing from the time an incident occurs until the requirement for management and operations no longer exists. This system can be utilized for any type or size emergency, ranging from a minor spill to a major emergency response. It also allows for the timely combining of resources from different agencies/contractors.

Injury - A measurable adverse change, either long or short term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil.

Inland Area - The area shoreward of the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, the area shoreward of the lines of demarcation (COLREG lines) defined in 33 CFR 80.740 through 80.850. The inland area does not include the Great Lakes.

Inland Zone - The environment inland of the coastal zone excluding the Great Lakes, Lake Champlain, and specified ports and harbors on inland rivers. (The term inland zone delineates an area of federal responsibilities for response actions. Precise boundaries are determined by agreements between the Environmental Protection Agency and U.S. Coast Guard and are identified in the Federal Regional Contingency Plans.)

Line Section - A continuous run of pipe that is contained between adjacent pressure pump stations, between a pressure pump station and a terminal or breakout tank, between a pressure pump station and a block valve, or between adjacent block valves.

Major River - A river that because of its velocity and vessel traffic, would require a more rapid response in case of a worst case discharge. For a list of rivers see "*Rolling Rivers, An Encyclopedia of America's Rivers*," Richard A Bartlett, Editor, McGraw-Hill Book Company, 1984.

Marine Transportation-Related Facility - Any offshore facility or segment of a complex regulated under section 311(j) of the Federal Water Pollution Control Act (FWPCA) by two or more Federal agencies including piping and any structure used or intended to be used to transfer oil to or from a vessel, subject to regulation under 33 CFR. For a facility or segment of a complex regulated by two or more Federal agencies under section 311(j) of the FWPCA, the marine transportation-related portion of the complex extends from the facility oil transfer system's connection with the vessel to the first valve inside the secondary containment surrounding tanks in the non-transportation-related portion of the facility or, in the absence of secondary containment, to the valve or manifold adjacent to the tanks comprising the non-transportation-related portion of the facility, unless another location has otherwise been agreed to by the COTP and the appropriate Federal official.

Maximum extent practicable - [Non-transportation-related facility] The limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore non-transportation-related facilities in adverse weather. The appropriate limitations for such planning are available technology and the practical and technical limits on an individual facility owner or operator.

[Transportation-related facility] The planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the criteria in 33 CFR or in a specific plan approved by the cognizant COTP.

[Pipeline] The limits of available technology and the practical and technical limits on a pipeline operator in planning the response resources required to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a pipeline in adverse weather.

Natural Resource Damage Assessment - The process by which trustees determine whether a resource has been injured and the loss associated with that injury, in order to affect restoration.

Natural resources - Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the exclusive economic zone), and State or local government or Indian tribe or foreign government.

Navigable Waters - The waters of the United States, including the territorial sea and such waters which are used for recreation; waters from which fish or shell fish are taken and sold in interstate or foreign commerce.

Nearshore Area - The area extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, the area extending seaward 12 miles from the line of demarcation (COLREG lines) as defined in 33 CFR 80.740 through 80.850.

Non-Petroleum Oil - Oil of any kind that is not petroleum-based. This category includes, but is not limited to, animal and vegetable oils.

Ocean - The offshore area and nearshore area as defined in 33 CFR.

Offshore Area - The area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR part 7 seaward to 50 nautical miles, except in the Gulf of Mexico. In the Gulf of Mexico, the area beyond 12 nautical miles of the line of demarcation (COLREG lines) defined in 33 CFR 80.740 through 80.850 of this chapter extending seaward to 50 nautical miles.

Oil - Oil of any kind or in any form, including, but not limited to, petroleum oil, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredge spoil.

Oil Groups -

Non-Persistent or Group I Oil - A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions -

- (1) At least 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F); and
- (2) At least 95% of which by volume, distill at a temperature of 370 degrees C (700 degrees F).

Persistent oil - A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of 33 CFR subpart F, persistent oils are further classified based on specific gravity as follows:

- (1) Group II - specific gravity less than 0.85
- (2) Group III - specific gravity between 0.85 and less than 0.95
- (3) Group IV - specific gravity from 0.95 and to and including 1.00
- (4) Group V - specific gravity greater than 1.00

Oil Spill Removal Organization (OSRO) - An entity that provides response resources.

Onshore Oil Pipeline Facilities - New and existing pipe, right-of-ways, and any equipment, facility, or building used in the transportation of oil located in, on, or under any land within the United States other than submerged land.

Operating Area - Geographic location(s), such as Rivers and Canals, Inland, Great Lakes, or Offshore, in which a facility is handling, storing, or transporting oil.

Operating Environment - Rivers and Canals, Inland, Great Lakes, or Ocean. These terms are used to define the conditions in which response equipment is designed to function.

Operating in Compliance with the Plan - Operating in compliance with the provisions of 33 CFR Subpart F including, ensuring the availability of the response resources by contract or other approved means, and conducting the necessary training and drills.

Operator - A person who owns or operates onshore oil pipeline facilities.

Passive use values - The values placed on those resources that are not normally associated with a monetary amount, such as, an endangered species, migratory birds, national parks, etc.

Pipeline - All parts of an onshore pipeline facility through which oil moves, including but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

Regional Incident Commander - The individual who is responsible for the management of incident operations for the region. The response resources of Regional Incident Commander should be adequate to respond to the worst case spill in the region. Under Navy policy, the RIC and the RQI are the same person.

Regional Qualified Individual - The English-speaking representative of the region (the Department of Defense On-Scene Commander), located in the United States, available on a 24-hour basis, with full authority to: activate and contract with required oil spill removal organization(s); activate personnel and equipment maintained by the operator; act as liaison with the OSC; and obligate any funds required to carry out all required or directed oil spill activities. Under Navy policy, the RQI and the RIC are the same person.

Repair - Any work necessary to maintain or restore a tank or related equipment to a condition suitable for safe operation.

Response Activities - The containment and removal of all from the land, water, and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the public health or welfare or the environment.

Response Area - The inland zone or coastal zone, as defined in this plan.

Response Plan - The operator's core plan and the response zone appendices for responding to the maximum extent practicable, to a worst case discharge of oil, or the substantial threat of such a discharge.

Response Resources - The personnel, equipment, supplies, and other capabilities necessary to perform the response activities identified in a response plan.

Response Zone - A geographic area either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide, spill response capabilities. The size of the zone is determined by the operator after considering available capability, resources, and geographic characteristics.

Rivers and Canals - A body of water confined within the inland area, including the Intracoastal Waterways and other waterways artificially created for navigation, that has a project depth of 12 feet or less.

Specified Minimum Yield Strength - The minimum yield strength, expressed in pounds per square inch, prescribed by the specification under which the material is purchased from the manufacturer.

Spill Management Team - The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Stress Level - The level of tangential or hoop stress, usually expressed as a percentage of specified minimum yield strength.

Substantial Threat of a Discharge - Any incident or condition involving a facility that may create a risk of discharge of oil. Such incidents include, but are not limited to, storage tank or piping failures, aboveground or underground tank or pipeline leaks, fires, explosions, flooding, spills contained within the facility, or other similar occurrences.

Unit - The organization element having functional responsibility for a specific incident planning, logistic, or finance activity.

16.0 ACRONYMS

A list of Abbreviations and Definitions is listed in Volume I, Section H of this OPLAN on page 1-17. Following is a listing of acronyms more specifically associated with oil and hazardous substance spill response and provided here so that this volume may stand alone. Some are included in this volume of the plan while others are provided for reference purposes.

AC	Area Committee
ACP	Area Contingency Plan
ANSI	American National Standards Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
AST	Aboveground storage tank
ASTM	American Society for Testing and Materials
ATSDR	Agency for Toxic Substances and Disease Registry
BOA	Basic Ordering Agreement
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CFR	Code of Federal Regulations
CHRIS	Chemical Hazards Response Information System
CNO	Chief of Naval Operations
CO	Commanding Officer
COE	Corps of Engineers (U.S. Army)
CWA	Clean Water Act
DFM	Diesel fuel, marine
DLA	Defense Logistics Agency
DOC	U.S. Department of Commerce
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOJ	U.S. Department of Justice
DOL	U.S. Department of Labor
DON	U.S. Department of the Navy
DOS	U.S. Department of State
DOT	U.S. Department of Transportation
DRAT	District Response Advisory Team
DRG	District Response Group (USCG)
DRMO	Defense Reutilization and Marketing Office
EFA	Engineering Field Activity (of NAVFAC)
EFD	Engineering Field Division (of NAVFAC)
EHM	Extremely hazardous material
EO	Executive Order
EPA	U.S. Environmental Protection Agency

EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan (of FRP)
ERT	Environmental Response Team
ESA	Endangered Species Act
FEMA	U.S. Federal Emergency Management Agency
FFA	Federal Facility Agreement
FIC	Facility Incident Commander
FOSC	Federal On-Scene Coordinator
FR	Federal Register
FRERP	Federal Radiological Emergency Response Plan
FY	Fiscal year
GSA	General Services Administration
HASP	Health and Safety Plan
HAZMAT	Hazardous material
HHS	U.S. Department of Health and Human Services
HM	Hazardous material
HS	Hazardous substance
HW	Hazardous waste
IAP	Incident Action Plan
IC	Incident Commander
ICS	Incident Command System
IFO	Intermediate fuel oil
IRP	Installation Restoration Program
JAG	Judge Advocate General
LEPC	Local Emergency Planning Committee
MGO	Marine gas oil
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
MSRC	Marine Spill Response Corporation
MTR	Marine Transportation Related
NACE	National Association of Corrosion Engineers
NAVFAC	Naval Facilities Engineering Command
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFESC	Naval Facilities Engineering Service Center
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center (USCG)
NRDA	Natural Resource Damage Assessment
NRS	National Response System
NRT	National Response Team
NSCC	National Scheduling Coordinating Committee
NSF	USCG National Strike Force
NSFCC	USCG National Strike Force Coordination Center (Elizabeth City, NC)

NVIC	USCG Navigation and Inspection Circular
OPA 90	Oil Pollution Act of 1990 (Public Law 101-380 of 18 Aug 90)
OPNAVINST	CNO Instruction
OSC	On-Scene Coordinator
OSRO	Oil Spill Removal Organization (classified by NSFCC)
OSHA	Occupational Safety and Health Administration
PA	Pollution Abatement (funds)
PLA	Plain Language Address (Navy jargon)
POC	Point of contact
POL	Petroleum-oil-lubricant
PPE	Personal protective equipment
PREP	Preparedness-for-Response Exercise Program (USCG)
QI	Qualified Individual
RA	Regional Administrator (EPA)
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
RIC	Regional Incident Commander
RPM	Remedial Project Manager
RP	Responsible Party
RQ	Reportable quantity (of hazardous substances)
RRC	Regional Response Center
RRT	Regional Response Team
SARA	Superfund Amendments and Reauthorization Act of 1986
SDWA	Safe Drinking Water Act of 1986
SECDEF	Secretary of Defense
SECNAV	Secretary of the Navy
SERC	State Emergency Response Commission
SI	Surface Impoundment
SIC	Standard Industrial Classification (codes)
SONS	Spill of National Significance
SPCC	Spill Prevention, Control, and Countermeasures (plan)
SSC	Scientific Support Coordinator (NOAA)
SUPSALV	Supervisor of Salvage (Navy)
SWDA	Solid Waste Disposal Act
TSCA	Toxic Substance Control Act
UIC	Uniform Identification Code
UL	Underwriters Laboratory
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USNPS	U.S. National Park Service
UST	Underground storage tank
VOSS	Vessel of Opportunity Skimmer System

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17.0 REFERENCES

This is an annotated list of references of particular interest to OPA 90 facilities. A table of key American Petroleum Institute standards is also provided.

15 CFR 990 NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA). Final Rule. Federal Register of 5 January 1996.

29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE U.S. DEPARTMENT OF LABOR. Federal Register of 18 Apr 1991. The OSHA requirement defining training required for workers at the site of a spill.

33 CFR 154. RESPONSE PLANS. U.S. DEPARTMENT OF TRANSPORTATION (COAST GUARD). Federal Register of 29 February 1996. The Coast Guard regulation on facility response plans for marine transportation-related facilities.

40 CFR 112. OIL POLLUTION PREVENTION. U.S. ENVIRONMENTAL PROTECTION AGENCY. Federal Register of 1 July 1994. The EPA regulation on facility response plans for non-transportation-related facilities.

49 CFR 171. OIL SPILL PREVENTION AND RESPONSE PLANS. U.S. DEPARTMENT OF TRANSPORTATION (RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION). Federal Register of 2 February 1993. The RSPA regulation on facility response plans for bulk packagings (tank cars and tank trucks).

49 CFR 194. RESPONSE PLANS FOR ONSHORE OIL PIPELINES. U.S. DEPARTMENT OF TRANSPORTATION (RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION). Federal Register of 5 January 1993. The RSPA regulation on facility response plans for pipelines off a facility's property.

40 CFR 300. NATIONAL OIL AND HAZARDOUS SUBSTANCE POLLUTION CONTINGENCY PLAN. U.S. DEPARTMENT OF TRANSPORTATION (COAST GUARD). Federal Register of 29 April 1992.

CHEMICAL HAZARD RESPONSE INFORMATION SYSTEM (CHRIS), VOLUME I: CONDENSED GUIDE TO CHEMICAL HAZARDS. COMMANDANT INSTRUCTION M16465.11B. U.S. COAST GUARD. 2 November 1992. A single-volume quick reference of MSDS-type information on numerous chemicals, including some fuels and oils. Has CHRIS codes, 3-letter codes for each chemical. Available by credit card via phone from Superintendent of Documents, (202) 783-3238; stock #050-012-00328-9; \$39 in 1993.

CHEMICAL HAZARD RESPONSE INFORMATION SYSTEM (CHRIS), VOLUME II: HAZARDOUS CHEMICAL DATA. COMMANDANT INSTRUCTION M16465.12B. U.S. COAST GUARD. 2 November 1992. A massive, unbound, detailed reference of MSDS-type information on numerous chemicals, including some fuels and oils. Has CHRIS codes, 3-letter codes for each chemical. Available by credit card over the phone from Superintendent of Documents, (202) 783-3238; stock #050-012-00329-7; \$50 in 1993.

GUIDE FOR DEVELOPMENT OF STATE AND LOCAL EMERGENCY OPERATIONS PLANS. FEDERAL EMERGENCY MANAGEMENT AGENCY. September 1990. Available from FEMA Publications Office: (202) 646-3484.

GUIDE FOR THE REVIEW OF STATE AND LOCAL EMERGENCY OPERATIONS PLANS. FEDERAL EMERGENCY MANAGEMENT AGENCY. September 1988. Available from FEMA Publications Office: (202) 646-3484.

HAZARDOUS MATERIALS CONTINGENCY PLANNING COURSE (STUDENT MANUAL). FEDERAL EMERGENCY MANAGEMENT AGENCY. June 1990. Available from FEMA Publications Office: (202) 646-3484.

INTERAGENCY AGREEMENT (IAA) BETWEEN THE UNITED STATES NAVY AND THE UNITED STATES COAST GUARD FOR COOPERATION IN OIL SPILL CLEAN-UP OPERATIONS AND SALVAGE OPERATIONS. SIGNED IN 1980. A mutual aid agreement concerning oil spill clean-up and salvage operations.

MEMORANDUM OF UNDERSTANDING BETWEEN THE SECRETARY OF TRANSPORTATION AND THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY. SIGNED 24 November 1971. PUBLISHED AT 36 FR 24080. This agreement established what kinds of facilities were transportation-related (DOT regulated) and what kinds were non-transportation-related (EPA regulated). For OPA 90 purposes, its main significance is that it set the jurisdictional boundaries between a marine transportation-related facility (USCG regulated) and an associated oil storage facility (EPA regulated). The boundary is the valve furthest from the tank(s) but still inside secondary containment if such containment exists, and the valve or manifold nearest the tank(s) otherwise.

NAVAL OIL SPILLS ANNUAL REPORT. NAVAL FACILITIES ENGINEERING SERVICE CENTER, CODE 413. An annual report on Navy oil spills occurring in the previous fiscal year. Data is presented by type of installation and by spill cause.

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 12-92. U.S. COAST GUARD.
Documentation of the USCG classification program for Oil Spill Removal Organizations (OSROs), i.e., response contractors.

OIL POLLUTION ACT OF 1990. Public Law 101.380 dated 18 August 1990.

OPNAVINST 5090.1A. ENVIRONMENTAL AND NATURAL RESOURCES PROGRAM MANUAL. DEPARTMENT OF THE NAVY. 2 October 1990. The Navy's guidance document on environmental matters, including oil and hazardous substance spills.

POLLUTION RESPONSE GUIDE AND EQUIPMENT MANUAL. U.S. NAVY SUPERVISOR OF SALVAGE. NAVSEA-S0300-BR-MAN-010. September 1993. Reference to SUPSALV capabilities and spill response equipment. Available from NAVSEA, (703) 607-2758 (Paul Hankins in 1993).

PREPAREDNESS-FOR-RESPONSE EXERCISE PROGRAM (PREP) GUIDELINES. U.S. COAST GUARD. August 1994. Guidelines for the PREP program which will be written into the final OPA 90 regulations. Any facility intending to follow PREP in lieu of individual regulation exercise requirements must use this document to understand commitments resulting from its use. Available by request from the Coast Guard: (202) 267-2616.

KEY INDUSTRIAL STANDARDS				
ISSUER	TYPE	NO.	TITLE	COMMENTS
API	Std	620	Design and Construction of Large, Welded, Low-Pressure Storage Tanks	
API	Std	650	Welded Steel Tanks for Oil Storage	
API	RP	651	Cathodic Protection of Above-Ground Petroleum Storage Tanks	
API	RP	652	Lining of Aboveground Petroleum Storage Tank Bottoms	
API	Std	653	Tank Inspection, Repair, Alteration, and Reconstruction	
API	Std	2000	Venting Atmospheric and Low-Pressure Storage Tanks (Non-refrigerated and Refrigerated)	
Issuers: API American Petroleum Institute (Publications Dept: (202) 682-8375)				Type standards: Std Standard RP Recommended Practice

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18.0 MAPS

The general position of the Cape Canaveral Air Force Station (CCAFS) within Brevard County is shown in Figure FRP 18.1 Brevard County.

Sensitive areas in and around Port Canaveral are identified in the Jacksonville Area Contingency Plan (ACP) and are shown in Figure FRP 18.2. This map has been copied from Page E-V-B-35 in the Jacksonville ACP.

The Cape Canaveral Port Complex is shown on Figure FRP 18.3 along with placement of Response Boom by the CCAS Fire Department.

The Port Canaveral development plan is shown in Figure FRP 18.4 which also reflects activities and facilities not related to CCAS.

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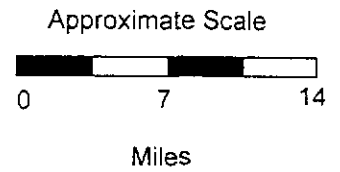
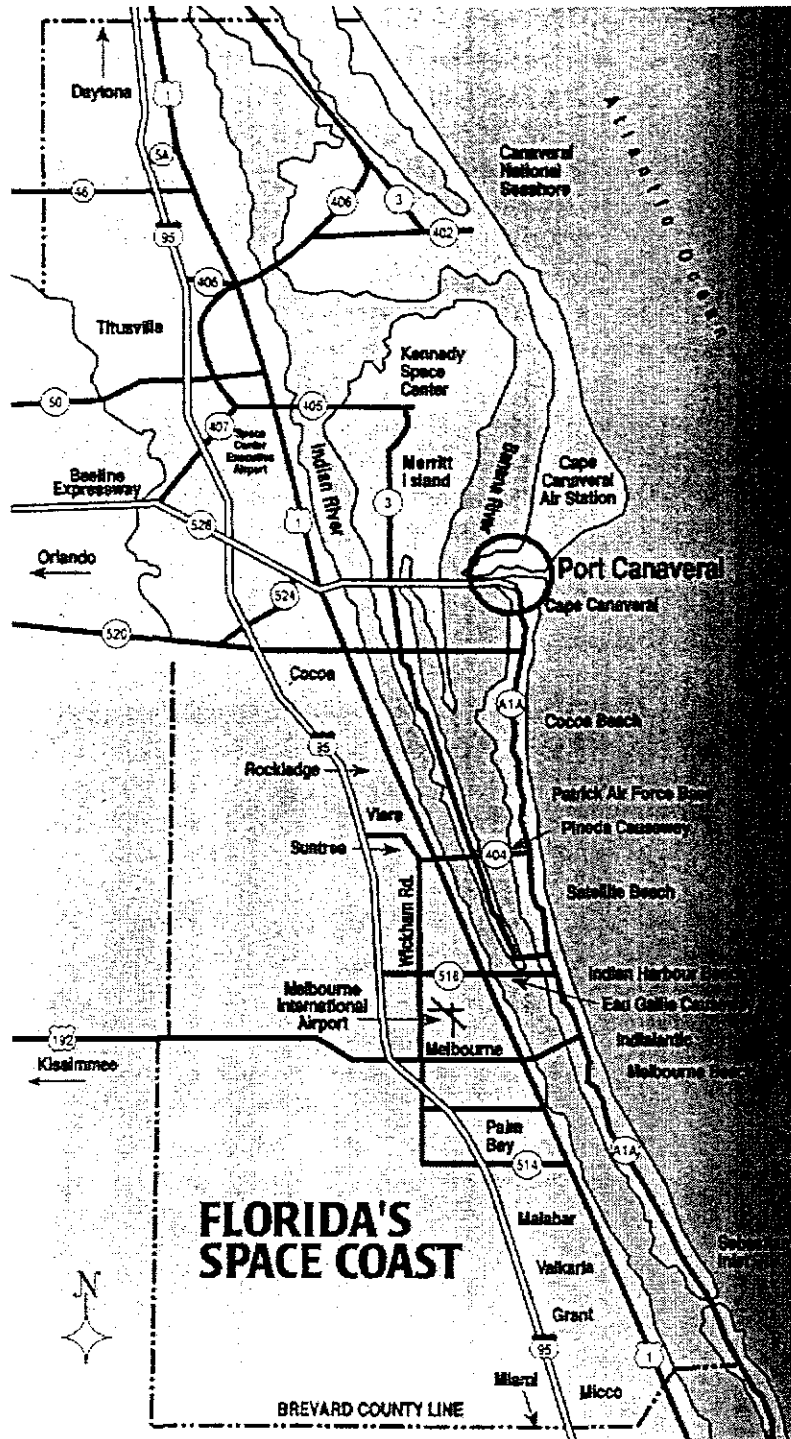


Figure FRP 18.1 Brevard County

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Jacksonville

Chart 11476a

prepared by NOAA

23-3,6 Protection Priority

▲ Collection Point

Sea Turtle Site

Bird Rookery

Eagle Nesting Site

Manatee

Boat Ramp

Airport

Boom

Special Land

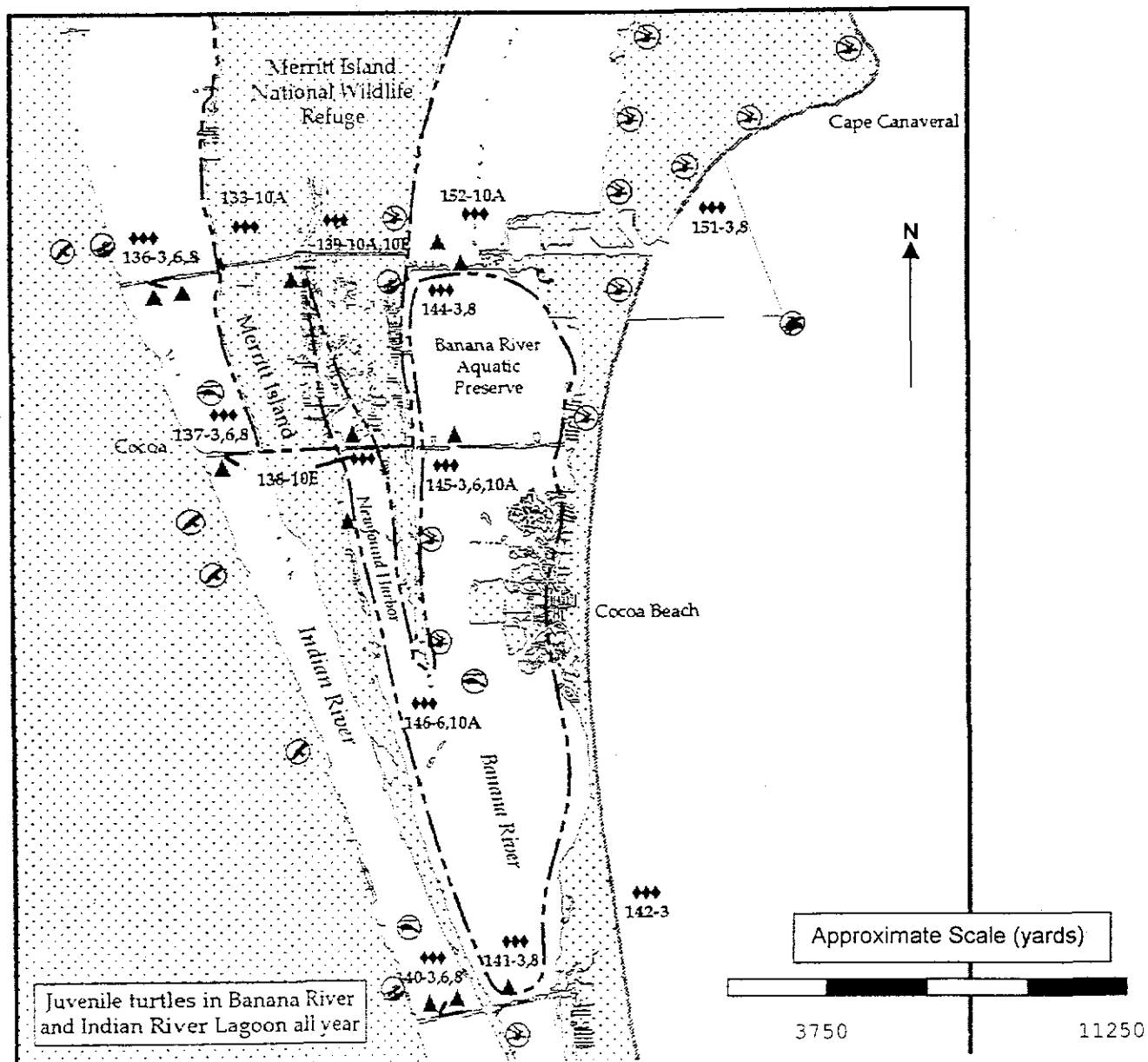


Figure FRP 18.2 Sensitive Areas

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Jacksonville

Chart 11478

prepared by NOAA

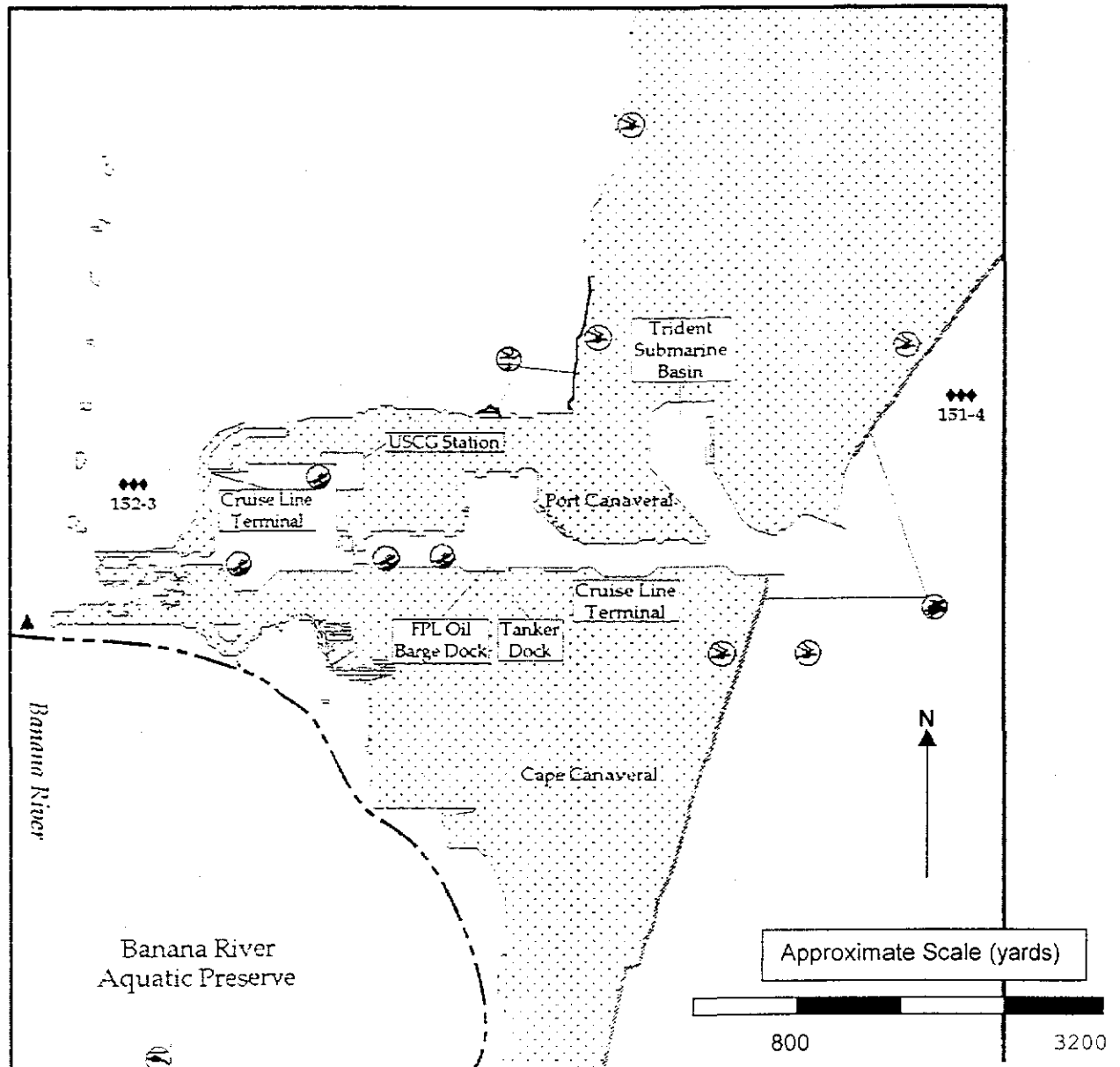
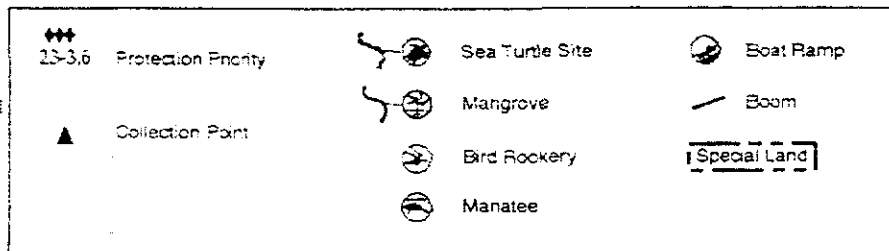


Figure FRP 18.3 Port Canaveral

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Port Canaveral 20 Year Master Plan Map

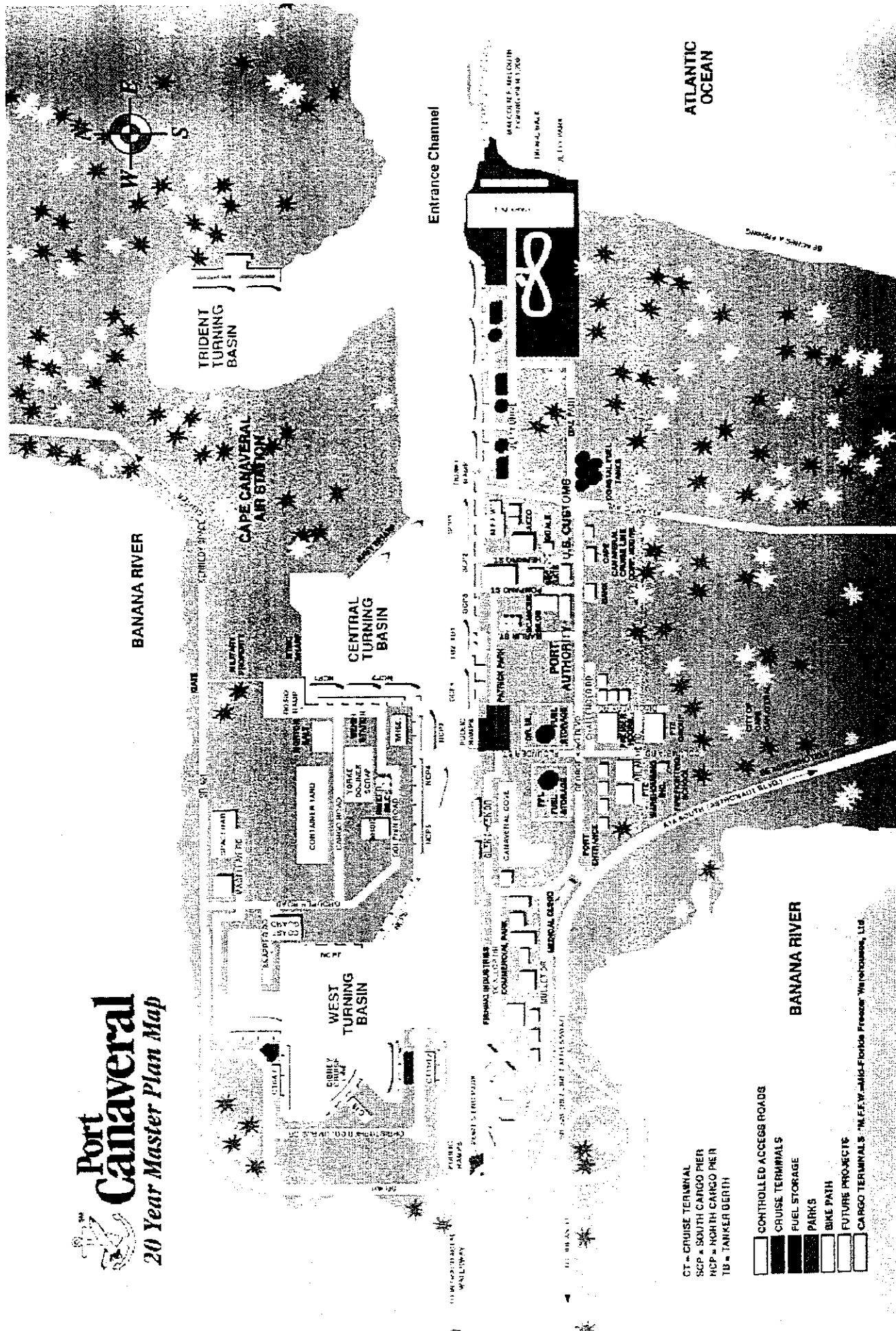


Figure FRP 18.4 Port Canaveral Development Plan

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APPENDIX A CROSS REFERENCE LIST

NOTE

The regulations require a cross reference for facility response plans that do not follow the exact format provided in the regulations. Since most Department of Defense facilities are "complex facilities," it is not possible to follow each of the regulatory prescribed formats in a single document.

The following Cross Reference showing the regulatory compliance between this plan and appropriate plans defined in the regulations.

USCG MTR FACILITY REQUIRED RESPONSE PLAN SECTIONS		COMPLEX FACILITY RESPONSE PLAN SECTIONS																						
		Emergency Action Plan	Facility Response Plan																					
		TOC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	A	B	C	D
1.	Introduction and Plan Contents		X																					
a.	Facility Name		X																					
	Street Address		X																					
	City		X																					
	County		X																					
	State		X																					
	ZIP Code																							
	Telephone Number		X																					
	FAX Number (if equipped)		X																					
b.	Facility Location		X																					
c.	Facility Owner/Operator Name		X																					
	Address		X																					
	Procedure for 24-Hr Contact		X																					
d.	Table of Contents		X																					
e.	Cross Index																							
f.	Record of Changes		X																		X			
2.	Emergency Response Action Plan																							
a.	Notification Procedures		X																					
i.	Name, Telephone, and Role For		X																					
	Facility Response Personnel		X																					
	Spill Management Team		X																					
	Oil Spill Removal Organizations		X																					
	Qualified Individual & Alternate		X																					
	Federal, State or Local Agencies		X																					

USCG MTR FACILITY REQUIRED RESPONSE PLAN SECTIONS		COMPLEX FACILITY RESPONSE PLAN SECTIONS																						
		Emergency Action Plan	Facility Response Plan																					
		TOC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	A	B	C	D
ii.	Discharge Notification Form			X																				
b.	Facility Spill Mitigation Procedures																							
i.	Non-Persistent and Persistent Oil:																							
	Average Most Probable Discharge																							
	Maximum Most Probable Discharge																							
	Worst Case Discharge																							
	Worst Case Discharge From Non-Transportation-Related Facility																							
ii.	Prioritized Procedures For Preventing/Mitigating Spills Involving:																							
	Transfer Equipment Failures																							
	Tank Overfill																							
	Tank Failure																							
	Piping Rupture																							
	Pipe Leaks																							
	Explosion or Fire																							
	Equipment Failure																							
iii.	Equipment List and Responsibilities of Facility Personnel for Mitigating an Average Most Probable Discharge																							
c.	Facility's Response Activities																							
i.	Facility Response Personnel Responsibilities Pending Arrival of Qualified Individual																							
ii.	Responsibility and Authority of Qualified Individual and Alternate																							
iii.	Facility Response Management:																							
	Command and Control																							
	Public Information																							
	Safety																							
	Liaison with Government Agencies																							
	Spill Operations																							

USCG MTR FACILITY REQUIRED RESPONSE PLAN SECTIONS			COMPLEX FACILITY RESPONSE PLAN SECTIONS																						
			Emergency Action Plan	Facility Response Plan																					
			TOC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	A	B	C	D
Planning									X																
Logistics Support								X																	
Finance								X																	
iv. Identification of Oil Spill Removal Organization and Management Team Capable of Responding to Average and Maximum Most Probable and Worst Case Discharges with Required Equipment and Supplies and Trained Personnel for 1st 7 Days of Response								X																	
d. Sensitive Areas						X																			
i. Identification of Sensitive Areas Impacted by Worst Case Discharge						X																			
ii. Worst Case Discharge Impact:						X																			
List of Sensitive Areas Impacted by Discharge of Non-Persistent, Persistent or Non-Petroleum Oils						X																			
Description of Protection Actions						X																			
Sensitive Area Map with Depiction of Response Actions						X																			
iii. Required Equipment and Personnel to Protect Sensitive Areas in Worst Case Discharge:						X																			
All Sensitive Areas for Required Distances, Type Oil, Area and Days						X																			
Equipment and Personnel Available by Contract or Other Approved Means									X																
e. Disposal Plan									X																
3. Hazard Evaluation						X																			
4. Discussion of Spill Scenario					X																				
5. Training and Drills																									
a. Training Procedures											X														
i. Identification of Training for Each Individual with Responsibilities in Plan and Method of Training for Volunteers and Casual Laborers										X															
ii. Recordkeeping Requirements										X															
b. Drill Procedures										X															
i. Type and Frequency of Drills										X															
ii. Recordkeeping Requirements										X															
6. Plan Review and Update														X											

APPENDIX B CONTRACTS, MOUs, IAGs, AND OTHER GOVERNMENT SUPPORT AGREEMENTS

The following agreements have been established between the Cape Canaveral Air Station and appropriate Oil Spill Contractors and organizations relating to implementation of OPA 90 requirements.

The following items are stored within the Port Canaveral complex and can be accessed through the:

Port Canaveral-Brevard County Spillage Cleanup Committee, Inc
P.O. Box 25
9020 Pompano Street
Cape Canaveral, FLA 32920

Boat, Pontoon

Boat, Jon Boat, Landau - Blue

Boat, Jon Boat, Landau - Blue

Boat, Jon Boat, Landau - Blue

Boat, Carolina Skiff, 19 ft.

Boat, Carolina Skiff, J-1650

Boat, Carolina Skiff, J-1650

Outboard Motor, 50 HP, Evinrude (Pontoon)

Outboard Motor, 4 HP, Johnson

Outboard Motor, 25 HP, Johnson

Outboard Motor, 25 HP, Johnson

Outboard Motor, 25 HP, Nissan

Outboard Motor, 48 HP, Johnson

Fuel Tanks, Outboard - 6 ea.

Trailer, Magic Trail Pontoon Boat, Hitch - 2"

Trailer, Wells Cargo, Supply Trailer, Hitch - 2 5/16"

Trailer, Highlander T19-20G, Jon Boats, Hitch - 2"

Trailer, Proline, 83" X 14' F.B. (Duel) Boom Trailer, Hitch - 2"

Trailer, Proline, 83" X 14' F.B. (Duel) Boom Trailer, Hitch - 2"

Trailer, Proline, 83" X 14' F.B. (Duel) Boom Trailer, Hitch 2"

Trailer, Continental, Carolina Skiff 19 ft., Hitch - 2"

Trailer, Magic Trail, CS 1650 Carolina Skiff 16 ft., Hitch - 1 7/8"

Trailer, Magic Trail, CS 1650 Carolina Skiff 16 ft., Hitch - 1 7/8"

Mop Machine, Oil Mop Inc., Model Mark 1-4 RG SR #1953

Skimmer, Skim-Pac, Model 4000 w/tubes and attachments

Double Barrel Stand for Mop Machine

Rope-Mop, Endless for Mop Machine

Pulley and Floats for Mop Machine

Oil Boom, OBM2, Mark II 22 oz. American Boom & Barrier - 4000 ft.

Towing Bridals, for Oil Boom - 5 ea.

Sorbent: 3M T-151 - 30 Bales
 Sorbent: Pom-Pom - 25 Boxes
 Sorbent: Fiberperl - 2 Bags
 Sorbent: Litter Type - 2 Bags
 Sorbent: K-Net - 2 Boxes
 Sorbent: 18" X 20" Organic Pads - 7 Boxes
 Sorbent: Spill Kits - 2 Barrels
 Sorbent: 18" X 20" Organic Pillows - 1 Box
 Sorbent: 4" X 4" Organic Socks - 18 ea.
 Sorbent: 2 Cu. ft. - 5 Bales
 Gaff Hook - 6 ft. - 2 ea.
 Dip Net - 14 ft. - 4 ea.
 40 lb. Anchors (with line & chain) - 3 ea.
 Anchor Buoys (with line) - 3 ea.
 10 lb. Anchors (with line) - 3 ea.
 Floats, 5" dia., Orange - 13 ea.
 Lead Weights, 8 oz. - 10 ea.
 Boom Stand Off - 2 ea.
 Life Jacket - Work Safety Vest - 6 ea.
 Life Vest - USCG Type II - 7 ea.
 Life Vest - Red Rubberized - 3 ea.
 Bouyant Cushions - 5 ea.
 Fire Extinguishers - 5 ea.
 Flares (packs) - 4 ea.
 Air Horn - 2 ea.
 Paddles - 9 ea.
 Combination Locks, Brass - 12 ea.
 Skimmer Boat, SeaArk Marine, - 1 ea.
 Boat Master Aluminum Trailer, Model 2426T w/Bronze Brakes: Tool Box on Trailer and Spare Tire with Mount - 1 ea.

 100 HP Commercial OMC O/B, Model 100 WTLZ with Prop - 1 ea.
 Master Transfer Pump w/Honda Engine & Lift Ring - 1 ea.
 Charcoal Boat Cover - 1 ea.
 70" Hose (Blue) - 1 ea.
 30" Hose (Blue) - 1 ea.
 16" Hose (Blue) - 1 ea.
 Skim-Pak Model 18000 - 1 ea.
 Skim-Pak Model 4000 - 1 ea.
 Grab Hook Pole - 1 ea.
 All-round Light Pole - 1 ea.
 First Aid Kit - 1 ea.
 Fire Extinguisher ABC 5 lbs. - 1 ea.
 Anchor 13 lb. W150' of 1/2" rope 7 6' of 5/16 chain - 1 ea.

Skimmer Suction Wand - 1 ea.
 Owners Packet (Warranty Info., Owners Manuals, etc.) - 1 ea.
 Keys - 1 set
 Spare Fuel Hose w/Bulb - 1 ea.
 Battery w/Box - 1 ea.
 Bilge Pump - 2000 GPH, Manual/Automatic - 1 ea.
 Straight PVC Fire Nozzle - 1 ea.
 400 Gal. Holding Tank w/Fork Lift Eyes & Sight Glass - 1 ea.
 3' Hose (Black) - 3 ea.
 5' Hose (Black) - 1 ea.
 18" Tie-Down Cord - 1 ea.
 31" Tie-Down Cord - 4 ea.
 Drain Plug - 1 ea.
 3/8" Mooring Line 25' Long w/Eyes - 2 ea.
 8" X 30" Boat Fenders w/6' of Line - 2 ea.
 3" Pipe Davit w/Winch - 1 ea.
 Telescoping Light Mast - 1 ea.
 Bow Mounted Skimmer Positioning Frame - 1 ea.
 Spare 10 amp. Terminals w/Fuses - 1 ea.
 Floodlights - 2 ea.
 5' PVC Expansion Plug for Gravity Drain w/Cord - 1 ea.

Trailer, Wells Cargo, Type EW2022 (24 ft. O.A.L.) (Located of Hitch A-Frame) -
 Oil Boom, 2000 ft. - 1 ea.
 Anchors, Danforth Type, 22 lb. - 20 ea.
 Rope, Polypropylene, 3/8 - 3 strand (1200 ft.) - 2 cl.
 Anchor Leader, 10 ft. Chain w/Shackle, each end - 20 ea.
 Towing Bridle - 2 ea.
 Spare Tire - 1 ea.
 Hydraulic Jack, 4 Ton Capacity - 1 ea.
 Lug Wrench - 1 ea.
 Tow Vehicle Electrical Connector - 1 ea.

Trailer, Wells Cargo, Type EW1222 (16 ft. O.A.L.) (Located on Hitch A-Frame)
 Oil Boom, 1000 ft. - 1 ea.
 Anchors, Danforth Type, 22 lb. - 10 ea.
 Rope, Polypropylene, 3/8 - 3 strand (600 ft.) - 1 cl.
 Anchor Leader, 10 ft. Chain w/Shackle, each end - 10 ea.
 Towing Bridle - 2 ea.
 Spare Tire - 1 ea.
 Hydraulic Jack, 4 Ton Capacity - 1 ea.
 Lug Wrench - 1 ea.
 Tow Vehicle Electrical Connector - 1 ea.

Trailer, Wells Cargo, Type EW 2022 (24 ft. O.A.L.) (Located on Hitch A-Frame)

Oil Boom, 1000 ft. - 1 ea.

Anchors, Danforth Type, 22 lb. - 10 ea.

Rope, Polypropylene, 3/8 - 3 strand (600 ft.) - 2 cl.

Anchor Leader, 10 ft. Chain w/Shackle, each end - 10 ea.

Towing Bridle - 2 ea.

Spare Tire - 1 ea.

Hydraulic Jack, 4 Ton Capacity - 1 ea.

Lug Wrench - 1 ea.

Tow Vehicle Electrical Connector - 1 ea.

APPENDIX C - FACILITY CLASSIFICATION, DISCHARGE PLANNING VOLUMES, RESPONSE DISTANCES

C.1 INTRODUCTION

This appendix contains information and derivations to establish:

- The harm classification for the various components of the CCAS facility.
- The tiered oil discharge planning volumes, the response capabilities required, and the discharge planning distances under the EPA, USCG and RSPA OPA 90 implementing regulations.
- The facility's tiered oil discharge planning volumes, required response capabilities and discharge planning distance. The discharge planning volumes, the response capabilities and discharge planning distances addressed in this FRP are the largest computed under the EPA and USCG OPA 90 implementing regulations.

C.2 TABLES

The following tables contain the information described in Section C.1:

Table APPENDIX C 1.1, MTR Facility Classification - The MTR facility of the Cape Canaveral Air Station is a significant and substantial harm facility under the USCG regulations. This table shows the applicable criteria for this classification.

TABLE APPENDIX C 1.1 MTR FACILITY CLASSIFICATION (USCG)	
Mobile MTR facility capable of transferring oil to and from vessel with capacity of 250 bbls or more?	
CHECK	CLASSIFICATION
XX	Yes, MTR facility is a substantial harm facility
	No, maximum capacity of vessel serviced is _____ bbls and 33 CFR 154 does not apply unless otherwise determined by the COTP
	No, facility is not a mobile MTR facility and 33 CFR 154 does not apply
Fixed MTR onshore facility used or intended to be used to transfer oil to and from vessel with capacity of 250 bbls or more?	
XX	Yes, MTR facility is a significant and substantial harm facility
	No, maximum capacity of vessel serviced is _____ bbls and 33 CFR 154 does not apply unless otherwise determined by the COTP
	No, facility is not a MTR facility and 33 CFR 154 does not apply

Table APPENDIX C 1.2, Data For Deriving MTR Facility Discharge Planning Volumes - This table contains facility data for computing the worst case discharge planning volume for the MTR facility.

TABLE APPENDIX C 1.2 DATA FOR DERIVING MTR FACILITY DISCHARGE PLANNING VOLUMES			
FACILITY OPERATING AREA			
TYPE(S) OF OIL HANDLED (I, II, III, AND IV)			
TYPE OF ACTIVITY (Worst Case)	TYPE OF OIL	VOLUME OF OIL (gallons)	COMMENTS
Air Force (Tanks)	DF-2 (Type I)	100,000	
Air Force (Skid Strip/Tank Trucks)	JP (Type I)	5,000	
Air Force (Atlas)	RP-1 (Type I)	15,800	
Air Force (Launch Recovery Boats)	Diesel (Type I)	not applicable	
NOTU (Submarine/Vessel)	Diesel (Type I)	5,000	
MSC (VANGUARD barge refueling)	Diesel (Type I)	250,000	
Military Traffic Management Command	Not Applicable	small quantities	

Table APPENDIX C 1.3, MTR Facility Worst Case Discharge Volume For Type I Oil - This table contains the computation of the MTR facility worst case discharge for type I oil.

TABLE APPENDIX C 1.3 MTR FACILITY WORST CASE DISCHARGE VOLUME FOR TYPE I OIL (USCG)	
ACTIVITY	WORST CASE DISCHARGE PLANNING VOLUME (gals)
MSC (VANGUARD barge refueling)	250,000

Table APPENDIX C 1.4, Worst Case Discharge On-Water And Onshore Recovery Planning Volumes For Type I Oil, MTR Facility - This table computes the required tiered on-water oil recovery, onshore oil recovery and temporary recovered oil storage capacities for the worst case discharge of type I oil.

TABLE APPENDIX C 1.4 WORST CASE DISCHARGE ON-WATER AND ONSHORE RECOVERY PLANNING VOLUMES FOR TYPE I OIL, MTR FACILITY (USCG)					
EMULSIFICATION FACTOR		% RECOVERED FLOATING OIL	% OIL ONSHORE		ON-WATER OIL RECOVERY RESOURCE MOBILIZATION FACTORS
[A]	[B]	[C]	TIER 1 [D]	TIER 2 [E]	TIER 3 [F]
1.0	20	10	0.15	0.25	0.40
TIERED ON-WATER RECOVERY PLANNING VOLUMES					
TIER 1 (gals/day) (WORST CASE VOLUME)(A)(B)(D)		TIER 2 (gals/day) (WORST CASE VOLUME)(A)(B)(E)		TIER 3 (gals/day) (WORST CASE VOLUME)(A)(B)(F)	
7,500		12,500		20,000	
REQUIRED CAPABILITY FOR CLOSE-TO-SHORE RESPONSE ACTIVITIES IN SHALLOW WATER					
Note: For nearshore operating areas, at least 20% of on-water recovery capability must be able to operate in water depths 6 ft or less					
TIER 1 (gals/day)		TIER 2 (gals/day)		TIER 3 (gals/day)	
1,500		2,500		4,000	
ONSHORE RECOVERY PLANNING VOLUME (gals) (WORST CASE VOLUME)(A)(C)			TEMPORARY OIL STORAGE CAPACITY 2x DAILY OIL RECOVERY RATE		
			TIER 1 (gals/day)	TIER 2 (gals/day)	TIER 3 (gals/day)
25,000			15,000	25,000	40,000

Table APPENDIX C 1.5, NTR Facility Classification- The NTR facility of the Cape Canaveral Air Station is a substantial harm facility under the EPA regulations. This table shows the applicable criteria for this classification.

TABLE APPENDIX C 1.5 NTR FACILITY CLASSIFICATION	
Maximum oil storage capacity is 250,000 gallons. Is this greater than 42,000 gallons and do operations include over the water transfers of oil to and from vessels?	
CHECK	CLASSIFICATION
XX	Yes, NTR facility is a substantial harm facility and a response plan is required
If no, is the maximum oil storage capacity equal to or greater than one million gallons?	
	No, a response plan submission is not required unless required by the EPA Regional Administrator
If yes, is there adequate secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground tank within each storage area?	
	No, NTR facility is a substantial harm facility and a response plan submission is required
If yes, is the facility located at a distance from an environmentally sensitive area (40 CFR 112, Appendix D) or public drinking water intake such that a discharge from the facility could cause injury to the environmentally sensitive area or shut down the public drinking water intake?	
XX	Yes, NTR facility is a substantial harm facility and a response plan is required
If no, has the facility had a reportable spill in an amount equal to or greater than 10,000 gallons within the past 5 years?	
	Yes, NTR facility is a substantial harm facility and a response plan is required
XX	No, a response plan submission is not required unless required by the EPA Regional Administrator

Table APPENDIX C 1.6, MTR Facility Response Planning Distance - This table establishes the response planning distance for the types of oil handled at the MTR facility and the characteristics of the water receiving the worst case discharge.

All fueling and related activities at Cape Canaveral take place within the Port of Canaveral. Any spill should be able to be contained within the Port by booming. Sensitive area sites within the Port of Canaveral and a five-mile radius of the Cape have been evaluated in determining response concerns.

TABLE APPENDIX C 1.6 MTR FACILITY RESPONSE PLANNING DISTANCE				
OIL TYPE	CHECK	TYPE OF WATER	RESPONSE DISTANCE PLANNING METHOD	DISTANCE IN MILES FROM FACILITY
I		Non-Tidal	24 hrs X (maximum current) mph	
I	XX	Tidal-Ebb		5
I	XX	Tidal-Flood	5 miles or to point of maximum tidal influence, whichever is less	5
II, III, IV, V, Non-Petroleum		Non-Tidal	48 hrs X (maximum current) mph	
II, III, IV, V, Non-Petroleum		Tidal-Ebb		15
II, III, IV, V, Non-Petroleum		Tidal-Flood	15 miles or to point of maximum tidal influence, whichever is less	15

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APPENDIX D LIST OF REPORTABLE QUANTITIES FOR HAZARDOUS SUBSTANCE RELEASES

A listing of EPA reportable quantities for hazardous substances can be obtained by referring to Volume 1, 40 CFR 302.

